DIGIMERGE TOUCH™

H.264 DIGITAL VIDEO RECORDER WITH TOUCH SENSITIVE CONTROL

INSTRUCTION MANUAL

English Version 2.0

DH200 SERIES

DIGIMERGE Right For Business™

www.digimerge.com

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Thank you for purchasing this product. Digimerge is committed to providing our customers with a high quality, reliable security solution.

This manual refers to the following models:

- DH200 Series
- DH200P Series

For more information on this product, firmware updates, and accessory products, please visit us at:

www.digimerge.com

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER. NO USER SERVICABLE PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the products ' enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

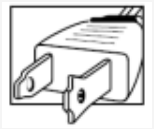
CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF THE PLUG TO THE WIDE SLOT AND FULLY INSERT.

Important Safeguards

In addition to the careful attention devoted to quality standards in the manufacturing process of your video product, safety is a major factor in the design of every instrument. However, safety is your responsibility too. This sheet lists important information that will help to assure your enjoyment and proper use of the video product and accessory equipment. Please read them carefully before operating and using your video product.

Installation

1. **Read and Follow Instructions** - All the safety and operating instructions should be read before the video product is operated. Follow all operating instructions.
2. **Retain Instructions** - The safety and operating instructions should be retained for future reference.
3. **Heed Warning**s - Comply with all warnings on the video product and in the operating instructions.
4. **Polarization** - Do not defeat the safety purpose of the polarized or grounding-type plug.

   A polarized plug has two blades with one wider than the other.

   A grounding type plug has two blades and a third grounding prong.

   The wide blade or the third prong are provided for your safety.

   If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
5. **Power Sources** - This video product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your location, consult your video dealer or local power company. For video products intended to operate from battery power, or other sources, refer to the operating instructions.
6. **Overloading** - Do not overload wall outlets of extension cords as this can result in the risk of fire or electric shock. Overloaded AC outlets, extension cords, frayed power cords, damaged or cracked wire insulation, and broken plugs are dangerous. They may result in a shock or fire hazard. Periodically examine the cord, and if its appearance indicates damage or deteriorated insulation, have it replaced by your service technician.
7. **Power Cord Protection** - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the video product.
8. **Ventilation** - Slots and openings in the case are provided for ventilation to ensure reliable operation of the video product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the video equipment on a bed, sofa, rug, or other similar surface. This video product should never be placed near or over a radiator or heat register. This video product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the video product manufacturer's instructions have been followed.
9. **Attachments** - Do not use attachments unless recommended by the video product manufacturer as they may cause a hazard.
10. **Camera Extension Cables** – Check the rating of your extension cable(s) to verify compliance with your local authority regulations prior to installation.
11. **Water and Moisture** - Do not use this video product near water. For example, near a bath tub, wash bowl, kitchen sink or laundry tub, in a wet basement, near a swimming pool and the like.

    Caution: Maintain electrical safety. Powerline operated equipment or accessories connected to this unit should bear the UL listing mark of CSA certification mark on the accessory itself and should not be modified so as to defeat the safety features. This will help avoid any potential hazard from electrical shock or fire. If in doubt, contact qualified service personnel.
12. **Accessories** - Do not place this video equipment on an unstable cart, stand, tripod, or table. The video equipment may fall, causing serious damage to the video product. Use this video product only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the video product. Any mounting of the product should follow the manufacturer's instructions and use a mounting accessory recommended by the manufacturer.

Service

13. **Servicing** - Do not attempt to service this video equipment yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
14. **Conditions Requiring Service** - Unplug this video product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
    - When the power supply cord or plug is damaged.
    - If liquid has been spilled or objects have fallen into the video product.
    - If the video product has been exposed to rain or water.
    - If the video product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the video product to its normal operation.
    - If the video product has been dropped or the cabinet has been damaged.
    - When the video product exhibits a distinct change in performance. This indicates a need for service.
15. **Replacement Parts** - When replacement parts are required, have the service technician verify that the replacements used have the same safety characteristics as the original parts. Use of replacements specified by the video product manufacturer can prevent fire, electric shock or other hazards.
16. **Safety Check** - Upon completion of any service or repairs to this video product, ask the service technician to perform safety checks recommended by the manufacturer to determine that the video product is in safe operating condition.
17. **Wall or Ceiling Mounting** - The cameras provided with this system should be mounted to a wall or ceiling only as instructed in this guide, using the provided mounting brackets.
18. **Heat** - The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

Use

19. **Cleaning** - Unplug the video product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
20. **Product and Cart Combination** - Video and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the video product and car combination to overturn.
21. **Object and Liquid Entry** - Never push objects for any kind into this video product through openings as they may touch dangerous voltage points or "short-out" parts that could result in a fire or electric shock. Never spill liquid of any kind on the video product.
22. **Lightning** - For added protection for this video product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the video product due to lightning and power line surges.

General Precautions

1. All warnings and instructions in this manual should be followed.
2. Remove the plug from the outlet before cleaning. Do not use liquid aerosol detergents. Use a water dampened cloth for cleaning.
3. Do not use this unit in humid or wet places.
4. Keep enough space around the unit for ventilation. Slots and openings in the storage cabinet should not be blocked.
5. During lightning storms, or when the unit is not used for a long time, disconnect the power supply, antenna, and cables to protect the unit from electrical surge.

FCC CLASS A NOTICE

NOTE

This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instruction manual, may cause harmful interference with radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case you will be required to correct the interference at your own expense.

This equipment has been certified and found to comply with the limits regulated by FCC, EMC, and LVD. Therefore, it is designated to provide reasonable protection against interference and will not cause interference with other appliance usage.

However, it is imperative that the user follows the guidelines in this manual to avoid improper usage which may result in damage to the unit, electrical shock and fire hazard injury.

In order to improve the feature functions and quality of this product, the specifications are subject to change without notice from time to time.

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Features

- H.264 compression, supports D1 resolution video recording
- Security Certified Hard Disk with up to 2TB of data storage
- Backup through USB port to flash and optical drives*
- Excellent quality live and recorded video and audio
- CMS application supports up to 10 DVRs simultaneously, 64 individual channels, view & playback
- GUI with mouse for easy set-up and programming
- 3G Smart phone viewing and control with Windows Mobile™*
- **Lite Touch** pad control

*Please visit www.digimerge.com/Touch for information, firmware, and compatibility updates for mobile viewing

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GETTING STARTED

The system comes with the following components:

DIGIMERGE TOUCH DIGITAL VIDEO RECORDER

POWER SUPPLY

MOUSE

REMOTE CONTROL

OCTOPUS CABLE
[16-CHANNEL ONLY]

INSTRUCTION MANUAL,
QUICKSTART GUIDE, &
SOFTWARE CD

HARD DRIVE SIZE, NUMBER OF CHANNELS, AND CAMERA CONFIGURATION MAY VARY BY MODEL. PLEASE REFER TO YOUR PACKAGE FOR SPECIFIC CONTENT DETAILS.

CHECK YOUR PACKAGE TO CONFIRM THAT YOU HAVE RECEIVED THE COMPLETE SYSTEM, INCLUDING ALL COMPONENTS SHOWN ABOVE.

BASIC SETUP

1. Connect the cameras

a. Connect BNC cameras to the BNC ports on the rear panel (4/8-channel models).

OR

a. **16-CHANNEL MODELS ONLY**: Connect the single end of the octopus cable to the VIDEO IN1-16 port (see figure 1.1).

b. Connect BNC cameras to the octopus cable.

Figure 1.0 Connect BNC cameras to the system

Figure 1.1 Octopus cable port (16-channel only)

2. Connect a monitor

a. Connect a VGA cable (not included) from the VGA port on the rear panel to the VGA port on your monitor.

OR

a. Connect a BNC terminated cable from one of the Video OUT ports to a TV or CCTV monitor.

Figure 1.2 Connect to a VGA or CCTV monitor, or a TV

3. Connect the mouse (USB or PS/2)

a. Connect the mouse to the USB mouse port on the rear panel.

NOTE: If using a PS/2 mouse, a USB adapter will be required (not included).

4. Connect the Ethernet cable

a. Connect an Ethernet cable to the LAN port on the rear panel of system; connect the other end of the Ethernet cable to an empty LAN port on your router or switch (not included).

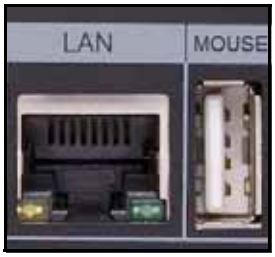


Figure 1.3 Connect an Ethernet cable and mouse

5. Connect the power cable

a. Connect the power supply to the DC 12V port on the rear panel of the system; connect the power cable to an outlet, power strip, or surge protector.

Figure 1.4 Connect the power cable

FRONT PANEL

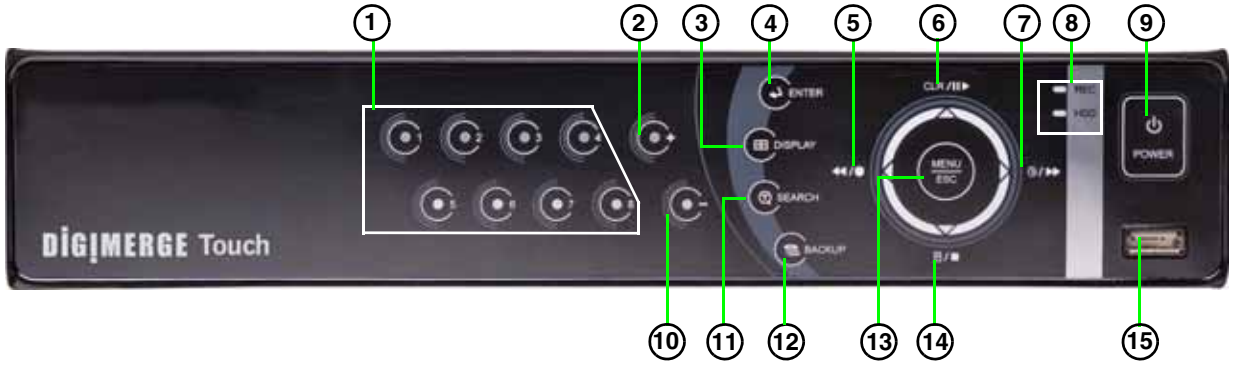


Figure 1.5 Front panel (8-channel model shown)

1. **Channel buttons**: Press to view channels individually in full-screen.
2. : Press to increase values in menu options.
3. : Press to switch between full-screen single channel, quad, and split-screen display views.
4. : Press to confirm menu options.
5. ◀◀ / ● : Press to perform the following:
   - *Live viewing*: Start/Stop recording (password required for stoppage)
   - *Playback*: Increase reverse playback speed 1X, 2X, 4X, 8X, and 16X
   - *Menu*: Move cursor left
6. **CLR II** ▶ : Press to perform the following:
   - *Live viewing*: Show/hide onscreen display (OSD)
   - *Playback*: Play/pause playback
   - *Menu*: Move cursor up
7. / ▶▶ : Press to perform the following:
   - *Live viewing*: Start/stop scheduled recording (Recording Schedule must already be configured; password required for stoppage)
   - *Playback*: Increase forward playback 1X, 2X, 4X, 8X, and 16X
   - *Menu*: Move cursor right
8. **LEDs**: REC will be solid red during recording; HDD will flash green when the system is accessing the HDD.
9. **POWER**: Press to power the system ON/OFF (password required).

Front Panel (cont'd.)

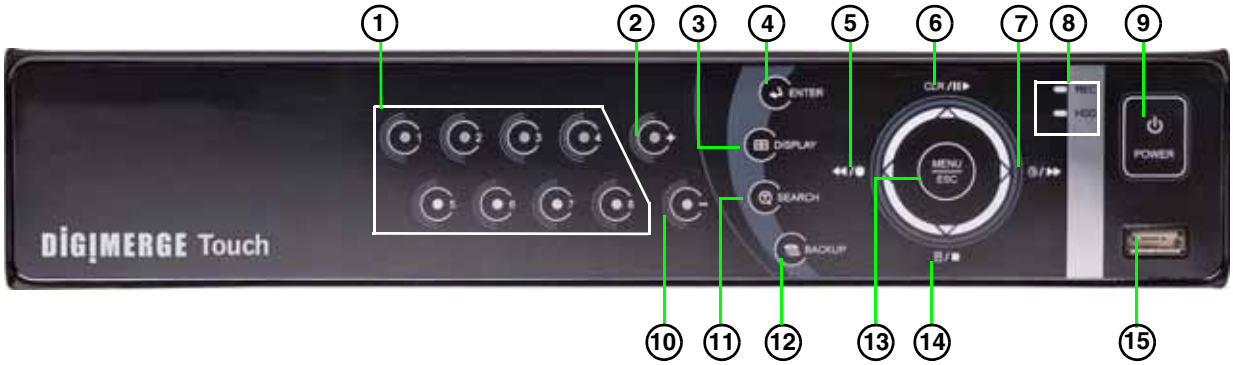


Figure 1.6 Front panel (8-channel model shown)

10. : Press to decrease values in menu options.
11. : Press to open/close the Time Search menu.
12. : Press to open/close the Backup menu.
13. **MENU/ESC**: Press to open/close the Main Menu; press to close menu windows.
14. /■: Press to perform the following:
    - *Live viewing*: Open the Log menu
    - *Playback*: Stop playback
    - *Menu*: Move cursor down
15. **USB Port**: Connect a USB flash drive, HDD, or optical drive for critical data backup; connect a USB flash drive for firmware upgrades.

REAR PANEL

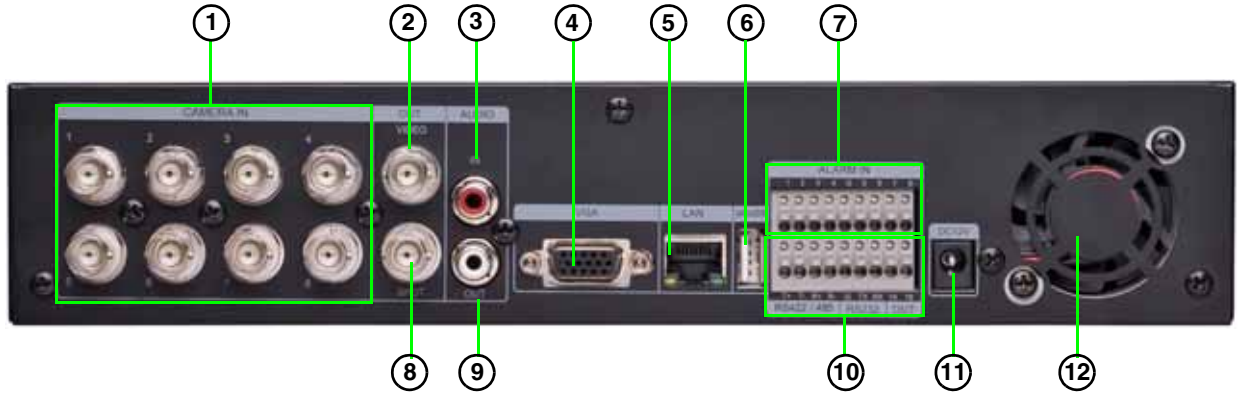


Figure 1.7 Rear panel (8-channel model shown)

1. **CAMERA IN**: Camera input ports for BNC cameras (4/8-channel);
   VIDEO IN 1-16: Port for octopus cable (16-channel models **only**—see figure 1.8)
2. **VIDEO OUT**: Video output (BNC) to connect the system to a secondary monitor or DVR.
3. **AUDIO IN**: One 3.5" RCA port (mono) for recording audio from an audio capable camera (not included).
4. **VGA**: VGA port to connect the system to a VGA monitor.
5. **LAN**: Connect an Ethernet cable to connect the system to a router or switch (not included).
6. **MOUSE**: USB port to connect a USB or PS/2 mouse (PS/2 mouse requires USB adapter).

   NOTE: Do not connect a USB flash drive to the "Mouse" port. The USB port on the front panel has been specifically designed for high-speed data transfer to a USB flash drive.
7. **ALARM IN**: Alarm block to connect external alarm or motion devices (not included).
8. **SPOT OUT**: Video output to connect the system to an external monitor (not included). Spot Out mode only displays channels switching in an automatic sequence.
9. **AUDIO OUT**: One 3.5" RCA port (mono) for audio output.
10. **RS422 / 485 / OUT**: Connection block for an RS422/485 PTZ camera (not included).

    NOTE: The RS232 ports are for development purposes only. A PTZ camera cannot be controlled from these ports.
11. **DC 12V**: Port for 12V DC 3A power supply (included).
12. **Exhaust fan**: Do not block. Keep clear to allow for proper ventilation.

Figure 1.8 Octopus cable VIDEO IN (16-channel only)

REMOTE CONTROL

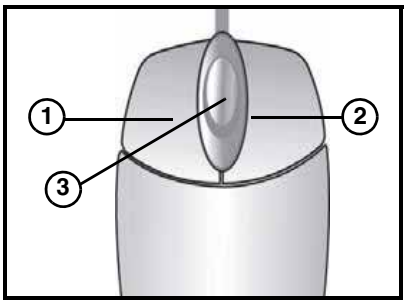
1. **LED Indicator**: Flashes red with every button-press.
2. **POWER**: Press to power the system ON/OFF (password required).
3. **Navigation/Menu**:
   - ▲: Press to move cursor up
   - ▼: Press to move cursor down
   - ◀: Press to move cursor left
   - ▶: Press to move cursor right
   - **MENU**: Press to open the Main Menu
4. : Press to switch between single channel full-screen, quad, and split-screen displays.
5. : Press to confirm menu options/selections.
6. **Playback controls**:
   - : Press to increase reverse playback speed 1X, 2X, 4X, 8X, and 16X.
   - ◀▶: Press to begin playback; press to switch between forward and reverse playback
   - : Press to increase forward playback speed 1X, 2X, 4X, 8X, and 16X
   - : During playback, press to pause; press repeatedly for frame-by-frame playback; during live viewing, press to open the PTZ menu
   - ■: Press to stop playback
   - : During playback, press to pause; press repeatedly for frame-by-frame playback; during live viewing, press to Spot Out.
7. **Channel buttons**: Press to view channels 1~8 individually in full-screen; press to input passwords; when entering camera titles, press for alpha-numeric characters.
8. : Press to open the Time Search menu.
9. **CANCEL/ESC**: Press to close menu windows; press to show/hide the on-screen display (OSD); press to clear channel indicators (loss, alarm, etc.).
10. **+**: Press to increase values in menu options.
11. **-** : Press to decrease menu options in menu options.
12. ●: Press to start/stop manual recording.

You can use the channel buttons on the remote control to enter numbers, letters, and other characters.

No	1st Press	2nd Press	3rd Press	4th Press	No	1st Press	2nd Press	3rd Press	4th Press
1	A	B	C	1	7	S	T	U	7
2	D	E	F	2	8	V	W	X	8
3	G	H	I	3	9	Y	Z	@	9
4	J	K	L	4	0	.	-	_	0
5	M	N	O	5	10+	SPACE			
6	P	Q	R	6					

MOUSE CONTROL

The mouse is the primary control device for the system. To connect a USB mouse:

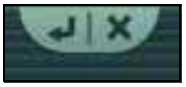


- Connect a USB / PS/2 mouse to the USB port on the rear panel—*DO NOT* connect the mouse to the USB port on the front panel. The USB port on the front panel is strictly intended for data transfer.

1. **Left-Button**: While in a split-screen display mode, double-click an individual channel to view it in full-screen; double-click again to return to the split-screen display mode. While navigating menus, click to select a menu option; double-click to open the next menu.
2. **Right-Button**: Right-click anywhere on the screen to open the Virtual Remote; double-click anywhere on the screen to return to the previous menu.
3. **Scroll-Wheel**: Move the scroll wheel up or down to increase/decrease the value of a selected menu option.

Mouse Tips

When using the mouse, the **ENTER** and **EXIT** buttons appear in the top-right corner of every menu window. When you change system settings and configurations, click ↵ to confirm your changes.



Touch Panel Tips and Tricks

If using the Touch panel, you will often use the following buttons when controlling the system:

- **CLR II ▸** : *Menus*: move cursor up; *Playback*: pause playback; *Live viewing*: show/hide OSD; clear channel icons
- /■: *Menus*: move cursor down; *Playback*: stop playback; *Live viewing*: open Log menu
- ◂◂/● : *Menus*: move cursor left; *Playback*: increase reverse playback speed; *Live viewing*: start/stop recording
- /▸▸: *Menus*: move cursor right; *Playback*: increase forward playback speed; *Live viewing*: start/stop scheduled recording
- Press the **MENU/ESC butto**n to open the main menu **AND** close windows/exit

NOTE: This manual refers to the CANCEL/ESC button on the remote control for closing/exiting menu windows. If using the front panel, press **MENU/ESC** to close/exit menu windows.

- Press the button to increase values for selected menu options
- Press the button to decrease values for selected menu options
- Press the button to enter/confirm.

USING THE SYSTEM

To power the system ON/OFF:

1. Connect the power cable to the port on the rear panel.
2. Press the **POWER** button on the front panel or remote control.

   NOTE: You need to press the Power button for initial startup *only*. The system will load the live viewing screen on subsequent resets.

   NOTE: You will need to input your system password (by default, **000000**) to power off the system.

Quick Setup

By default, the system has Quick Setup enabled. Quick Setup lets you quickly adjust the time and record mode on the system. The system menu will appear as the Quick Setup menu with only Time and Record options available.

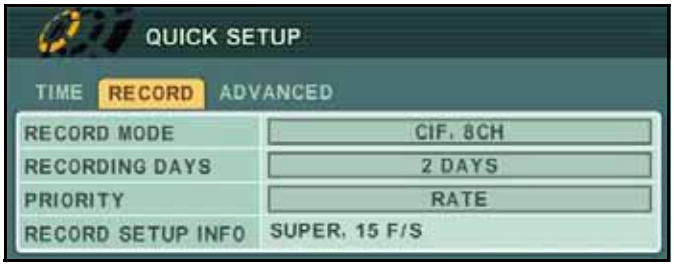


Figure 2.0 Quick Setup menu

Using Quick Setup

Use Quick Setup to set the time and configure basic recording settings.

To set the time:

1. Under the Time tab, select **DATE** and press the **ENTER** button. Enter the month, day, and year.
2. Select **TIME** and enter the time (hh/mm/ss).

   NOTE: If using the mouse, you will enter the date and time with the Virtual Keyboard.

3. Press the **ENTER** button to save your changes.

To configure recording settings:

1. Stop ALL RECORDING on the system. Enter your system password (by default, 000000).
2. Under the RECORD tab, select **RECORD MODE** and select one of the following: **CIF 4CH**, **FIELD 4CH**, **FRAME 4CH**, **CIF 8CH**, **FIELD 8CH**, **FRAME 8CH**, or **CIF + FRAME**.

   NOTE: If "CIF + FRAME" recording mode is selected, only channel 1 will record in frame—the remaining channels will record in CIF.

3. Under the RECORD tab, select **RECORDING DAYS**. Press the +/ - buttons and select **12 HOURS, 1~6 DAYS, 1~20 WEEKS**, or **NONE**.

Using Quick Setup (cont'd.)

4. Under PRIORITY, select **QUALITY** (the quality of the video) or **RATE** (frames per second). If you select RATE, the video quality and frames per second will be at the lowest possible setting. This will reduce overall video quality, but will maximize the available hard drive space. Adjust this setting to best suit your recording environment and security needs. For details on configuring recording options, see "RECORD" on page 24.

   NOTE: The necessary recording parameters will appear under RECORD SETUP INFO at the bottom of the Quick Setup window.
5. Press the **ENTER** button to save your settings.

Enabling/Disabling Quick Setup

You must disable Quick Setup in order to access the full system main menu.

To disable Quick Setup:

1. Under the ADVANCED tab, select **RUN ADVANCED**.
2. Select **ON** and press the **ENTER** button. The window closes. Quick Setup has been disabled. The full main menu will appear when you press the MENU button.

To enable Quick Setup:

1. Press the **MENU** button. The Main menu opens.
2. Select **DISPLAY** and press the **ENTER** button.
3. Under the DISPLAY SETUP tab, move the cursor to **QUICK SETUP**, select **ON** and press the **ENTER** button.
4. Press the **CANCEL/ESC** button to exit.
5. Press the **MENU** button again to open the Quick Setup menu.

Password

The default system password is **000000**. However, you do not have to enter a password upon initial startup. You can enable this option in Main Menu>System>**General**. For details, see "GENERAL" on page 29. For complete information on changing your password and managing users on the system, see "ACCOUNT" on page 29.

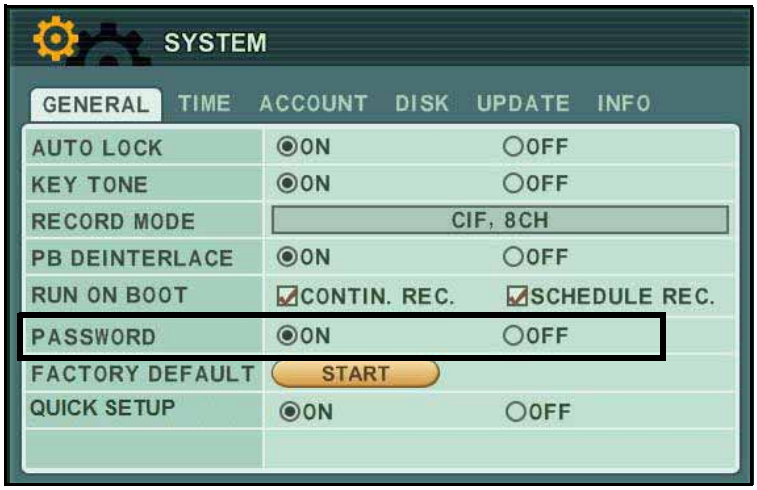


Figure 3.0 Enable password (optional)

On-Screen Display

The system shows the following for all display views:

Figure 4.0 Main system display

1. **Recording**: "REC" indicates that continuous recording is enabled on at least one channel.

   NOTE: If REC does not appear on the onscreen display the system is NOT RECORDING.

2. **Display**: Show live video and playback in single channel full-screen, quad, and split-screen configurations.
3. **Camera Status**: Will display a green Motion icon, purple Loss icon, or red Alarm icon.

4. **Channel number**: By default, the individual channel number appears at the bottom of the frame with either a RED number (recording) or WHITE number (no recording).

   NOTE: A white number may mean that a channel has been assigned motion recording. For details, see “Recording” on page 16.

5. **Status**: Shows recording, display type, and network status. "**R**" indicates recording; indicates schedule recording.

   NOTE: Always check for these icons. If "**R**" does not appear in the status bar, the system is NOT RECORDING. If does not appear in the status bar, Schedule Recording is NOT ENABLED.

6. **Channel Title**: You can customize the channel with a unique name for each channel. See “CAMERA” on page 23.
7. **Date/Time**: Shows the date (mm/dd/yyyy), day of the week, and time (24-hour clock).
8. **HDD/Record days**: The percentage of free space remaining on the hard disk; number of recording days remaining.

Using the Virtual Remote

Right-click anywhere on the screen to open the Virtual Remote. The Virtual Remote gives you quick access to many of the system's features using only a USB mouse (included).

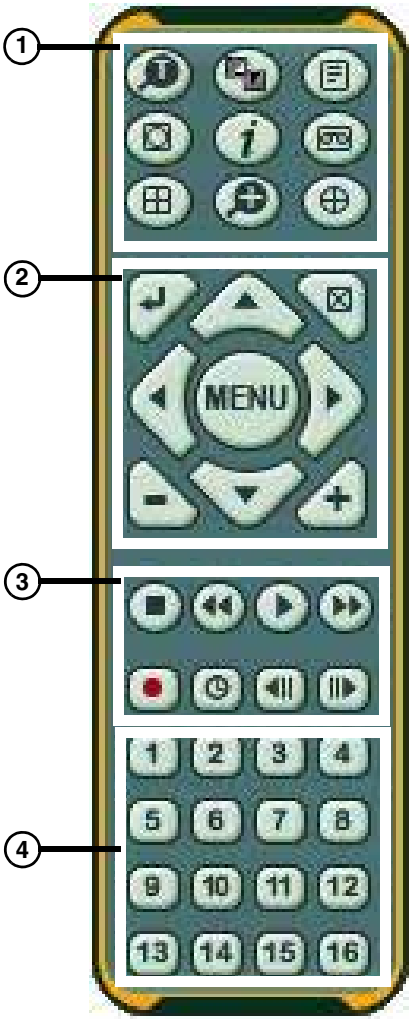


Figure 4.1 Virtual Remote

1. **Quick Function Keys**:
   - : Time Search
   - Window Positioning
   - : Log
   - : Spot Out
   - System Info
   - Backup
   - : Display Mode
   - Zoom
   - : PTZ
2. **Navigation/Menu**:
   - ▲: Move cursor up
   - ▼: Move cursor down
   - ◀: Move cursor left
   - ▶: Move cursor right
   - **MENU**: Press to open/close the Main Menu; press to close menu windows
   - : ENTER/confirm menu options/selections
   - : Close menu windows; press to show/hide the onscreen display (OSD); press to clear channel indicators (loss, alarm, etc.)
   - **+**: Increase values in menu options.
   - **-** : Decrease menu options in menu options
3. **Playback controls**:
   - ■: Stop playback
   - : Increase reverse playback speed 1X, 2X, 4X, 8X, and 16X
   - ▶: Start playback; press to switch between forward and reverse playback
   - : Increase forward playback speed 1X, 2X, 4X, 8X, and 16X
   - ●: Start manual recording (if scheduled recording is not active)
   - : Starts/stops Schedule Recording
   - : During playback, click to pause; click repeatedly for frame-by-frame playback; during live viewing, click to open the PTZ menu
   - : During playback, click to pause; click repeatedly for frame-by-frame playback; during live viewing, click to SPOT OUT
4. **Channel buttons**: Click to view channels 1~8 individually in full-screen; click to input passwords; when entering camera titles, click for alpha-numeric characters.

Playback

During playback, you can right-click anywhere on the screen to open a condensed version of the Virtual Remote.

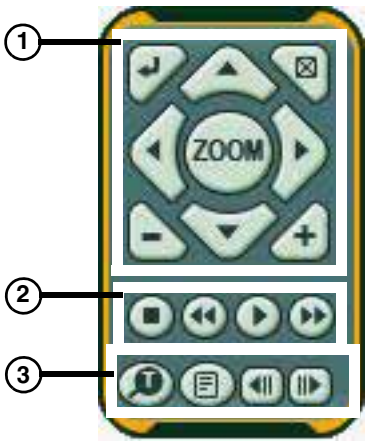


Figure 4.2 Virtual Remote during Playback

1. **Navigation/Menu**:
   - ▲: Move cursor up
   - ▼: Move cursor down
   - ◀: Move cursor left
   - ▶: Move cursor right
   - **ZOOM**: Click to open/close the Zoom windows. Click ↵ to activate zoom then click **+ / -** to increase 2X, 4X.
   - ↵ : Click to confirm menu options/selections
   - ☒ : Click to close menu windows; click to show/hide the onscreen display (OSD); click to clear channel indicators (loss, alarm, etc.)
   - **+**: Increase values in menu options.
   - **-** : Decrease menu options in menu options
2. **Playback controls**:
   - ■: Stop playback
   - ◀◀ : Increase reverse playback speed 1X, 2X, 4X, 8X, and 16X
   - ▶: Start playback; press to switch between forward and reverse playback
   - ▶▶ : Increase forward playback speed 1X, 2X, 4X, 8X, and 16X
3. **Quick Function Keys**:
   - : Click to open the Time Search menu
   - : Click to open the Log menu
   - : During playback, click to pause; click repeatedly for frame-by-frame playback
   - : During playback, click to pause; click repeatedly for frame-by-frame playback

Using the Virtual Keyboard

When configuring certain options, such as Camera Title, the Virtual Keyboard opens to make mouse input easier.

Figure 4.3 Virtual Keyboard

Setting the Time

It is highly recommended to set the time on the system prior to doing any recording.

NOTE: All recording must be stopped on the system in order to set the time.

Figure 5.0 Time menu

To set the date and time:

1. Stop recording on the system by pressing ◀◀/● on the front panel, or pressing the ● button on the remote control and enter your 6-digit system password (by default, **000000**).

   NOTE: If using the mouse, right-click and then click ● on the Virtual Remote.

2. Press the **MENU** button to open the system menu. Select **SYSTEM** and press the **ENTER** button. The System menu opens.
3. Select the **TIME tab**.
4. Select **DATE** and enter the date (mm/dd/yyyy).
5. Select **TIME** and enter the time (hh/mm/ss).

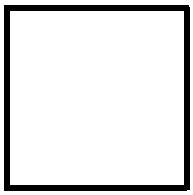
   NOTE: If using the mouse, use the Virtual Keyboard to enter the date and time.

6. Press the **ENTER** button to save your changes.
7. Press ◀◀/● on the front panel, or press the ● button on the remote control to resume Continuous Recording.

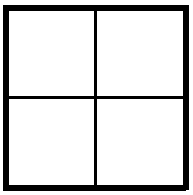
   NOTE: If using the mouse, right-click and then click ● on the Virtual Remote.

Multi-Screen Display

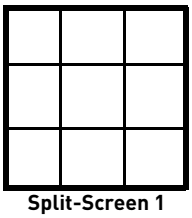
The system can display channels in full-screen single channel, quad, and multi split-screen displays.



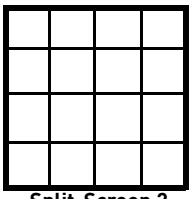
Full-Screen



Quad



Split-Screen 1



Split-Screen 2
(16-channel models only)

Repositioning Channels

You can reposition the channels on the display screen. This can be very useful when monitoring a live location(s).

To reposition the display channels:

1. Using the mouse, remote control, or front panel, place the main display screen in either a quad display, or in a multi split-screen configuration.

   NOTE: Repositioning will not work if the main display screen is in full-screen single channel.

1. Using the mouse, right-click anywhere on the screen to open the Virtual Remote.
2. From the Virtual Remote, click . The Blue Window cursor appears in the top-left channel (typically channel 1).
3. Reposition the channels through the following:
   - **Remote Control**: Press the button for the channel you wish to place in the location of the Blue Window cursor. For example, if the cursor is on channel 1, and you want to have channel 4 in its location, press the 4 button on the remote control
   - **Front Panel**: Press the button for the channel you wish to place in the location of the Blue Window cursor

Figure 6.0 Blue Window cursor is in channel 1
Press the 3 button to move channel 3 to the channel 1 position.

Figure 6.1 Channels repositioned
Channel 3 is now in the channel 1 position.

4. Press the ▲▼◀▶ to change the location of the Blue Window cursor.
5. Press the **ENTER** button to save your settings.

Zoom

Use the system's built-in 2X digital zoom to get a closer look at images in full-screen (full-screen mode only).

To use zoom:

1. From live viewing, press the number buttons on the front panel or remote control to select a channel to view in full-screen.

   NOTE: The zoom function will not work if the main display screen is in quad or split-screen configurations.

2. Press the **ENTER** button. The OSD disappears. A black frame appears in the center of the screen.

Figure 7.0 Zoom frame (full-screen only)

OPTIONAL:

Once the frame is visible, you can also perform the following:

- Press **+ / -** to shrink the frame
- Press the **ENTER** button to zoom in **2X**

3. Once the frame is visible, perform any of the following:
   - Press ▲▼◀▶ to move the frame anywhere on the screen
   - Press the **ENTER** button to zoom in **1X**
   - Press **+** to zoom in **2X**; press **-** to zoom out **1X**
   - Press ▲▼◀▶ to scan the image
4. Press the **CANCEL/ESC** button to exit zoom and return to live viewing.

Sequential Setup (Auto Sequence)

Sequential Setup (Auto Sequence) allows you to view connected cameras in an automatic sequence. Sequential Setup can include both full-screen and split screen modes.

For more details on Sequential Setup, see see "Sequential Setup" on page 22.

RECORDING

By default, the system is set to immediately record at startup from connected cameras—continuous recording. It is highly recommended to keep continuous recording on at all times.

The system can perform Continuous Recording, Event Recording, and Schedule Recording. However, the system can only perform one type of recording at a given time.

Continuous Recording

By default, all camera channels are enabled with continuous recording. During Continuous Recording, the **REC icon** appears in the top left corner of the OSD, "**R**" appears in the status bar at the bottom of the OSD, and any connected cameras will have their channel numbers in **RED** (see figure 0.0).

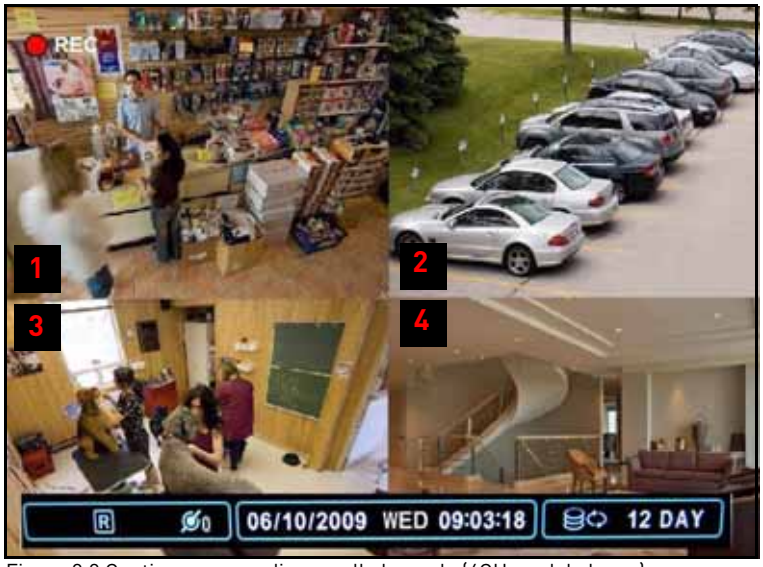


Figure 8.0 Continuous recording on all channels (4CH model shown)

- In this example, Continuous Recording is on ALL channels (default)

Event Recording

The system includes three modes of event recording:

- **Motion**: The system **only** records when motion is detected by the affected camera
- **Alarm**: The system records when an alarm or sensor is triggered
- **Video Loss**: The system records when a camera is disconnected or suffers video loss. The system employs a pre-record function to capture video seconds before the video loss occurred

You can customize the recording parameters (video quality, frames-per-second) of Event Recording in the Record menu. See "RECORD" on page 24.

Motion

Motion Detection must be applied to specific cameras. If you assign Motion Detection to a camera, that camera will **only record** when a motion event is triggered. The camera enabled with Motion Detection will have a **WHITE** number on the OSD (see figure 8.1).

Figure 8.1 Motion assigned to channel 4 (4CH model shown)

- In this example, motion detection was assigned to camera 4, so the channel number is WHITE
- Continuous Recording remains on channels 1~3

NOTE: A white number can also indicate that recording on a camera has been disabled. For better security it is highly recommended to keep continuous recording for all cameras on at all times. Use caution when assigning motion detection to specific cameras.

When motion is detected by the camera, the motion icon will appear, and the channel number will turn **RED** (see figure 8.2).

Figure 8.2 Motion was detected on camera 4 (4CH model shown)

- In this example, motion was detected on camera 4—the motion icon appears and the channel number turns RED
- Continuous Recording remains on channels 1~3

NOTE: Press the CANCEL/ESC button on the remote control, front panel, or Virtual Remote to clear the motion icon.

NOTE: If you assign motion detection to ALL cameras, the REC icon will not appear in the top-left corner, but the "**R**" will remain in the status bar of the OSD.

Alarm

When an alarm is triggered, the system will continue to record, but can apply unique recording parameters that you can set in the Alarm menu (Main Menu>Alarm). For details, see "ALARM" on page 24.

NOTE: Press the CANCEL/ESC button on the remote control, front panel, or Virtual Remote to clear the alarm icon.

Video Loss

If a camera is disconnected or is damaged, the video loss icon will appear for the affected channel. The channel number will turn WHITE.

NOTE: Once video has been restored, press the CANCEL/ESC button on the remote control, front panel, or Virtual Remote to clear the video loss icon.

Schedule Recording

Schedule Recording can be set manually or at startup. Schedule Recording features customizable recording parameters that you assign to each camera.

ATTENTION: Schedule Recording takes priority over all other recording modes.

Figure 8.3 Schedule Recording screen

The Schedule recording icon— —indicates schedule recording is enabled. If you do not see the icon, schedule recording is NOT ENABLED.

For details on setting a recording schedule, see "SCHEDULE" on page 25.

Recording Audio

The system can record one channel of audio. You must have an audio enabled camera or self-powered microphone connected to the system in order to use this function. For details on connected audio recording devices, see "Appendix I: Using Listen-in Audio" on page 85.

PLAYBACK

View recorded video on the system through playback mode.

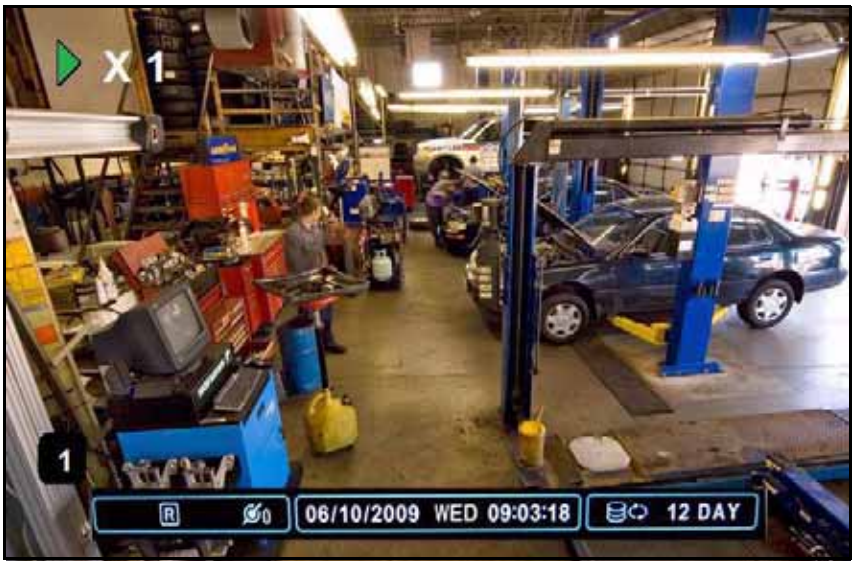


Figure 9.0 Playback display view

To begin playback:

1. Press the ◀▶ button on the remote control. The system will play the last few minutes of the most recently recorded video.
2. Press the following buttons on the remote control to use playback functions:
   - ◀▶: Press to switch between forward and reverse playback
   - ⊕◀‖: Press to pause playback; press repeatedly for frame-by-frame reverse playback
   - ▣‖▶: Press to pause playback; press repeatedly for frame-by-frame forward playback
   - ◀◀: Press to increase reverse playback speed 1X, 2X, 4X, 8X, and 16X
   - ▶▶: Press to increase forward playback speed 1X, 2X, 4X, 8X, and 16X
   - ■: Press to stop playback and return to live viewing

SEARCH

Search for recorded video data on the system using the Time Search menu.

To open the Time Search menu:

- Press the button on the front panel or remote control

Figure 10.0 Time Search menu

To search for recorded video:

1. Press ◀▶ to select the month.

2. Press▼ to move the cursor to the calendar. The date is highlighted with a black square.
3. Press ▲▼◀▶ to select dates with either Alarm, Motion, or Normal recordings and press the **ENTER** button. The detailed Time Search menu opens.

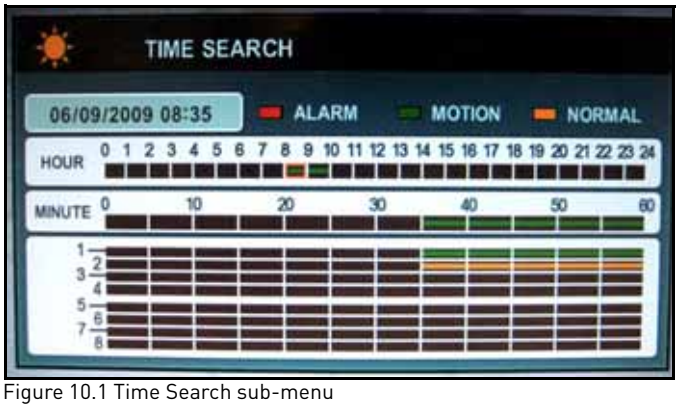


Figure 10.1 Time Search sub-menu

4. Press ▲▼◀▶ to select recording blocks in Hour, Minute, or Camera and then press the **ENTER** button. Recording blocks are distinguished by Alarm (red), Motion (green), and Normal (orange).
5. Use the playback buttons on the remote control or the front panel to control playback.
6. Press ■ to stop playback and return to live viewing.

USING THE MAIN MENU

To open the Main Menu:

- Press the **MENU** button on the front panel or the remote control

  NOTE: Quick Setup must be disabled in order to view the full system Main Menu. For more details see "Setting the Time" on page 13.

Figure 11.0 System Main Menu

1. **DISPLAY**: Adjust OSD borders, camera titles, colors, split-screen configuration, and Auto Sequence settings.
2. **CAMERA**: Adjust brightness, color, contrast, title, PTZ settings, and enable/disable convert.
3. **MOTION**: Configure the motion grid, sensitivity, and motion recording time.
4. **RECORD**: Enable/disable recording for each camera; set video quality and frame rate.
5. **ALARM**: Enable/disable alarm recording for each camera; set alarm type, configure alarm setup.
6. **SCHEDULE**: Customize four kinds of recording modes according to a daily or weekly schedule.
7. **NETWORK**: Configure IP, email, and DDNS settings.
8. **SYSTEM**: Configure various system settings including date/time, quick setup, users, HDD settings, and system information.

DISPLAY

Use the Display menu to configure the OSD and Auto Sequence settings.

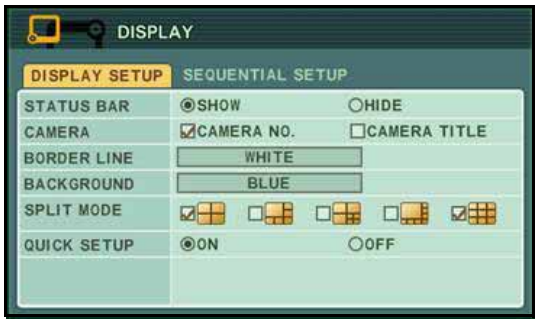


Figure 12.0 Display menu

To change display settings:

1. Select the **DISPLAY SETUP** tab, and configure the following:
   - **STATUS BAR**: Select to Show or Hide the status bar on the OSD.
   - **CAMERA**: Select to show the CAMERA NO. or the CAMERA TITLE or both.
   - **BORDER LINE**: Set the color for the borders of the OSD: WHITE, BLACK, DARK GREY, or GREY
   - **BACKGROUND**: Set the background color for disconnected cameras on the main display: GRAY, WHITE, BLUE, or DARK GREY
   - **SPLIT MODE**: Set up to four split-screen display modes

   - **QUICK SETUP**: Select **ON/OFF** to enable/disable the quick setup menu
2. Press **ENTER** to save your changes and exit.

Sequential Setup

Configure Sequential Setup (Auto Sequence) settings.

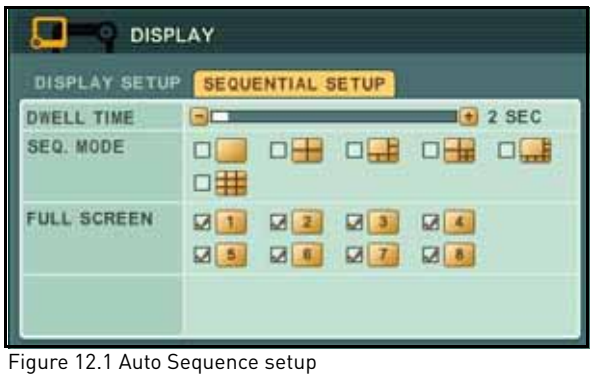


Figure 12.1 Auto Sequence setup

To configure Sequential Setup settings:

1. Select the **SEQUENTIAL SETUP** tab and configure the following:
   - **DWELL TIME**: Set from 1~30 seconds.
   - **SEQ. MODE**: Set the display mode, from single channel full-screen to 8-channel split-screen

     NOTE: You *must* select one of these display modes to enable Auto Sequence mode. If none of these modes are selected, Auto Sequence *will not* begin.
   - **FULL SCREEN**: Select channels for full-screen display. If selected, these channels will appear in full-screen during Auto Sequence mode
2. Press the **ENTER** button to save your settings and enable Auto Sequence. Auto Sequence will immediately begin.
3. Press the **DISPLAY** button to stop Auto Sequence.

Auto Sequence with Front Panel and Remote Control

Once you have configured the Auto Sequence settings in the Display menu, you can use the remote control to turn Auto Sequence on/off.

To enable/disable Auto Sequence:

1. Press and hold ⊞ on the front panel or remote control for 2 seconds.
2. To exit press ⊞. The main screen will return to a quad display.

CAMERA

Configure various camera settings, such as brightness, contrast, title, and covert.

Figure 13.0 Camera menu

To configure camera settings:

1. Under CAMERA SELECTION, press ◀▶ to select the camera.
2. Press ▼ to configure the following:
   - **COVERT**: Select **YES**/**NO**. If YES, the camera channel will be obscured from live viewing to give the impression that no camera is recording. Use this option if the display monitor is in public view.

     NOTE: The Covert channel will use the same background color as a disconnected camera. To change the background color, see "DISPLAY" on page 22.

   - **BRIGHTNESS**, **CONTRAST**, **COLOR**: Adjust from **0~100**.
   - **TITLE**: Use the alpha-numeric buttons on the remote control to enter a name/title for the camera. Press ◀▶ to move the cursor left/right. If you make a mistake, press **CANCEL/ESC** to return to the Main Menu and start again.
   - **PTZ MODEL**: Select the model of your connected PTZ camera (not included).
   - **PTZ ID**: Enter your PTZ ID (PTZ ID should match the camera channel to which you have connected the PTZ camera)
3. Repeat for other camera connected to the system.
4. Press **ENTER** to save your settings. Press **CANCEL/ESC** to close remaining menu windows.

MOTION

Configure the motion grid and motion sensitivity for specific channels.

NOTE: If motion detection is applied to a camera, the system will record from that camera **only** when motion is detected.

Figure 14.0 Motion menu

To configure motion settings:

1. Under RECORD TIME, adjust the time from **10~300** seconds.

   NOTE: The set recording time is applicable to all channels.
2. Press ▼ to select CAMERA SELECTION and press ◀▶ to select the camera.
3. Press ▼ to select SENSITIVITY, and adjust from **1~20**. The higher the number, the greater the sensitivity.
4. Press ▼ to select MOTION GRID. Press **+** to move the cursor to the Motion Grid.
5. Press **+** to select blocks on the grid. A green motion icon appears on the grid.

   - Press ▲▼◀▶ to select a block on the grid

- Press **+** enable/disable motion sensitivity. Disabled blocks are colored *grey*. Active blocks will be *turquoise-colored* when motion is detected. Move an object in front of the selected camera to test sensitivity and enable/disable the appropriate blocks
- Press **-** to exit the grid
- Press ◀▶ to select **All/Clear** and then press **+**.

Select ALL.

Clear.

6. Press **ENTER** to save your settings. Press **CANCEL/ESC** to close remaining menu windows.

RECORD

Configure recording parameters for each channel.

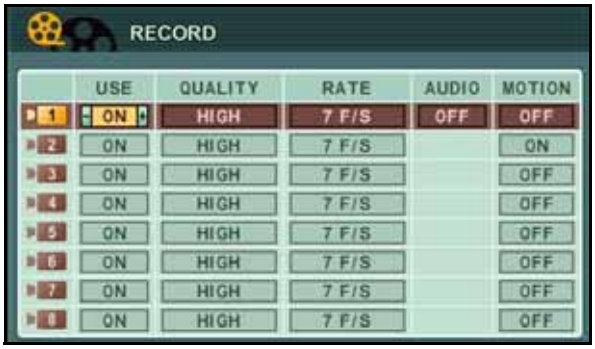


Figure 15.0 Record menu

To configure recording settings:

1. Press ▲▼ to select a camera.
2. Press ◀▶ to select an option and the press **+** / **-** to configure the following:
   - **USE**: Select **ON**/**OFF**. If OFF, the selected camera(s) will not record.
   - **QUALITY**: Select **LOW**, **MIDDLE**, **HIGH**, **SUPER**, and **ULTRA**.
   - **RATE**: Select **1**, **2**, **3**, **4**, **5**, **6**, **7**, **10**, or **15** fps.
   - **AUDIO**: Select **ON**/**OFF**. Audio capable cameras or microphones are required for audio recording.
   - **MOTION**: Select **ON**/**OFF**. Motion Grid and sensitivity must be configured in the Motion menu. See "MOTION" on page 23.
3. Press **ENTER** to save your settings. Press **CANCEL/ESC** to close remaining menu windows.

ALARM

Configure recording parameters for alarm recording.

NOTE: An external alarm device is not included with the system.

Figure 16.0 Alarm menu

To configure alarm settings:

1. Under RECORD SETUP, press ▲▼ to select a camera. Press ◀▶ to select an option and press **+** / **-** to configure the following:
   - **USE**: Select **ON**/**OFF**. If OFF, the selected camera(s) will not record.
   - **QUALITY**: Select **LOW**, **MIDDLE**, **HIGH**, **SUPER**, and **ULTRA**.
   - **RATE**: Select **1**, **2**, **3**, **4**, **5**, **6**, **7**, **10**, or **15** fps.
   - **AUDIO**: Select **ON**/**OFF**. The number of audio input channels varies by model.
   - **INPUT**: Select **N.O**/ **N.C**.

TIP!

When you have configured settings for one camera, press ⊞ to apply the settings for the rest of the cameras!

2. Under ALARM SETUP, configure the following:
   - **RECORD TIME**: Set from **10~300 seconds** (in increments of 10 seconds).
   - **RECORD CAMERA**: Select **ALL** or **1:1**. If you select ALL, the system will record on all channels; if you select 1:1, the system will only record for the designated channel
   - **ALARM BUZZER**: Select **ON/OFF**. If ON, the system will sound a beep when the external alarm is triggered
   - **ALARM OUT1**: Set the type of Alarm Out video (external monitor required, not included). Select **SYSTEM**, **VIDEO LOSS**, **MOTION**, **ALL ALARM**, or **ALARM IN1~8**, and then select **ON**/**OFF**.

Figure 16.1 Alarm Setup

3. Press **ENTER** to save your settings. Press **CANCEL/ESC** to close remaining menu windows.

   NOTE: Alarm recording will take priority over continuous recording, even if a camera is disabled in standard recording parameters.

TIP!
If an alarm is triggered on the system, press the Cancel/ESC button to cancel the buzzer (if enabled). Cancelling the buzzer *will not* stop recording.

SCHEDULE

Set four recording modes in a daily or weekly schedule.

NOTE: Daily has priority over a Weekly schedule.

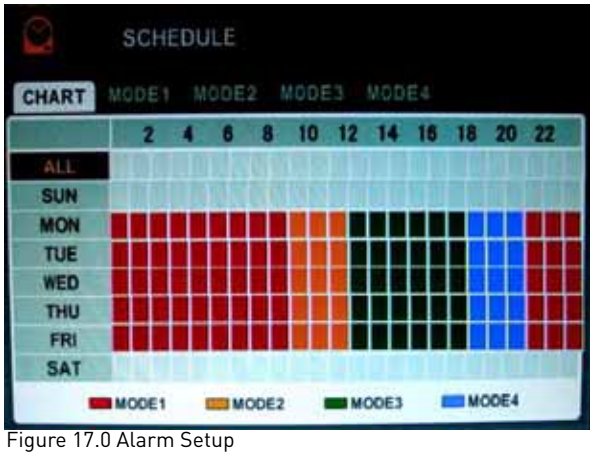


Figure 17.0 Alarm Setup

To set a recording schedule:

1. Press ◀▶ to select **MODE1** (red), **MODE2** (orange), **MODE3** (green), or **MODE4** (blue).
2. With a mode selected, configure the following:
   - **USE**: Select **ON**/**OFF**. If OFF, the selected camera(s) will not record.
   - **QUALITY**: Select **LOW**, **MIDDLE**, **HIGH**, **SUPER**, and **ULTRA**.
   - **RATE**: Select **1**, **2**, **3**, **4**, **5**, **6**, **7**, **10**, or **15** fps.
   - **AUDIO**: Select **ON**/**OFF**. Audio channels vary by model.
   - **MOTION**: Select **ON**/**OFF**. Motion Grid and sensitivity must be configured in the Motion menu. See "MOTION" on page 23.
3. Select the **CHART tab** and select **ALL**, **SUN**, **MON**, **TUE**, **WED**, **THU**, **FRI**, or **SAT**, and press the **ENTER** button or **+/-**. The Schedule sub-menu opens.
4. Enter **BEGIN** and **END** times, and select the **MODE** for ten time slots.

5. Press the **ENTER** button to save your settings. The Schedule sub-menu closes. The assigned mode appears in the main Schedule window.
6. Press **CANCEL/ESC** to close remaining menu windows.
7. To enable the recording schedule, press ◷/⏭ on the front panel or ◷ on the Virtual Remote.

Figure 17.1 Schedule recording

Stopping Scheduled Recording

If you need to stop a recording schedule, press ◷/⏭ on the front panel or ◷ on the Virtual Remote and enter your 6-digit system password (by default, **000000**).

> **NOTE:** Always look for the ◷ icon in the status bar. If you do not see the ◷ icon, schedule recording is NOT ENABLED.

Overnight Recording

If you want to program an overnight recording schedule, you will need to split the time using the available time slots in the Schedule sub-menu.

Example

You are a small business owner that wants your custom recording schedule to record from **9 PM to 8 AM, Monday to Friday**.

To set the schedule:

1. From the Schedule menu, select **MODE1~4**.

Figure 17.2 Split the overnight recording time

2. Customize the **video quality**, **frame rate**, and **motion detection** for the desired channels. For this example, **Mode 1** will have **cameras 1** and **2** set to **ULTRA** and **15 fps**, while the remaining cameras will be set to **HIGH** and **7 fps**.
3. Select the **CHART** tab and select **MON** and then press the **ENTER** button. The Schedule sub-menu opens.
4. Under BEGIN, press the **number buttons** on the front panel or remote control to enter **21:00**. Under END, enter **23:59**.

   NOTE: If using the front panel, you can select digits by pressing **+ / -**. You need to press **+ / -** to select 0.
5. Under MODE, select **MODE1**.
6. Press ▶ to move the cursor to BEGIN in the right-hand column. Enter **00:00**. Under END, enter **08:00**.
7. Under MODE, select **MODE1**.
8. Press the **ENTER** button to save your settings and return to the main Schedule menu. Mode 1 (red) will appear in the designated time block in the schedule.
9. Repeat steps 1~8 for **Tuesday~Friday**.
10. Press ◷/⏭ on the front panel or ◷ on the Virtual Remote to enable scheduled recording.

NETWORK

Configure network and DDNS options.

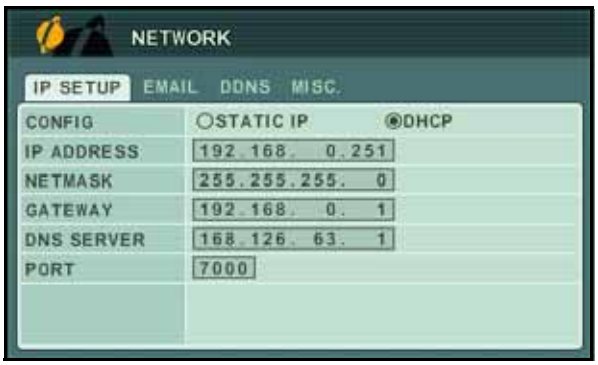


Figure 18.0 Network menu (IP setup)

To configure IP Setup:

1. Connect an Ethernet cable to the LAN port on the rear panel of the system.
2. Disconnect the power cable and let the system power down for a few moments. Reconnect the power cable. The system automatically powers on.
3. Under CONFIG, select **STATIC** or **DHCP**. DHCP allows you to instantly obtain an IP address when first networking your system. STATIC IP lets you manually enter a fixed IP address. If you select STATIC, go to step 4.

   NOTE: DCHP allows you to quickly connect to your network by obtaining an IP address from the router. After the initial setup, we recommend that you disable DHCP and set the IP address between 1~100. For example, if your IP address is 192.168.0.107, change the last digits to 90 (i.e. 192.163.0.90). This ensures that port forwarding will not change in the event of power failure or resetting of your network.

4. Press **ENTER** to save your settings. Press **CANCEL/ESC** to close remaining menu windows.

EMAIL

Configure settings for email notification of events on the system.

Figure 18.1 Email menu

To configure email settings:

1. Under USE, select **DEFAULT** or **SMTP** (your own email server). If you select DEFAULT, go to step 7. If you select SMTP, go to step 2.
2. Under SMTP SERVER, enter **your SMTP email server**.
3. Under SMTP PORT, enter **your SMTP port**.
4. Under SMTP AUTH, select **ON**.
5. Under SMTP USER ID, enter **your SMTP user name**.
6. Under SMTP PASSWORD, enter **your SMTP password**.
7. Under EMAIL ADDRESS, enter the recipient email address for the email notification. You can add up to five email addresses.
8. Press **ENTER** to save your settings. Press **CANCEL/ESC** to close remaining windows.

   NOTE: When an event is triggered, you will receive an email alert. If no events occur in the next 5 minutes, you will no receive another email.
   If a new event is triggered during that minutes, you will only receive the new email 5 minutes after the first email.

DDNS

Configure Digimerge DDNS settings.

NOTE: You must register for the FREE Digimerge DDNS service prior to configuring DDNS settings.

Figure 18.2 DDNS menu

To configure DDNS settings:

1. Under USE, select **DIGIMERGE** or **OFF**.
2. Under DOMAIN NAME, enter only the **first portion of your DDNS domain** from the confirmation email. For example, if your domain name is tomsmith@digimerge.ddns.net, you only need to enter *tomsmith* in the text field.
3. Under USER ID, enter your **Digimerge DDNS user name**.
4. Under PASSWORD, enter your **Digimerge DDNS password**.

   NOTE: Obtain your Digimerge DDNS user name and password from the confirmation email.

5. Under DDNS TEST, select **START**. If successful, you see "GOOD." If unsuccessful, you will see "ERROR." If you receive an error, please check your network connections and carefully re-enter your Digimerge DDNS information.
6. Press **ENTER** to save your settings. Press **CANCEL/ESC** to close remaining windows.

   NOTE: You can also enter DDNS information remotely using DVR NetView. For details, see "Appendix C: Setting Up DDNS Service" on page 72.

MISC

Configure additional network settings.

Figure 18.3 MISC menu

To configure bandwidth settings:

1. Under BANDWIDTH, select **64 KBPS**, **128 KBPS**, **256 KBPS**, **512 KBPS**, **1 MBPS**, **2 MBPS**, **4 MBPS**, **8 MBPS**, or **UNLIMITED**.

   NOTE: By default, the system is set to UNLIMITED. Change the bandwidth setting to maximize your network performance.

2. Press **ENTER** to save your settings. Press **CANCEL/ESC** to close remaining windows

SYSTEM

Configure System settings.

Figure 19.0 Setup menu

GENERAL

To configure general system settings:

1. Select the GENERAL tab and configure the following:
   - **AUTO LOCK**: Select **ON/OFF**. If ON, the front panel touch-screen will be disabled after 3 minutes of inactivity. Enter your system password (by default, 000000) to disable.

     NOTE: Auto Lock is not available if Password is set to "OFF."

   - **KEY TONE**: Select **ON/OFF**. If ON (default), the system will "beep" whenever a button is pressed on the front panel or remote control
   - **RECORD MODE**: Displays the current resolution on the system. To edit, you must use DVR NetView remote client software (included). For details, see "SYSTEM" on page 65.
   - **PB INTERLACE**: Select **ON/OFF**. If ON, image flickering will be reduced, but overall image quality may also be reduced. If OFF, there will be better image quality on still images, but image flickering during live viewing and playback.
   - **RUN ON BOOT**: This option sets the default recording mode when the system starts up. Select **CONTIN. REC** for Continuous recording; select **SCHEDULE REC** for the system to record according to a recording schedule(s). For more details on setting recording schedules, see see "SCHEDULE" on page 25.
   - **PASSWORD**: Select **ON/OFF**. If ON, the system will prompt you for a password when opening the main menu

     NOTE: You must set the Password to "ON" in order to use the Auto Lock.

   - **FACTORY DEFAULT**: Select **START** and press the **ENTER** button to restore the system to the original factory settings
   - **KEY SENSITIVITY**: Adjust the sensitivity of the buttons on the front panel from **1 (low) ~ 5 (high)**
2. Press **ENTER** to save your settings. Press **CANCEL/ESC** to close remaining windows.

TIME

For more details, on setting the date and time, see "Recording" on page 16.

ACCOUNT

Only the ADMIN can configure user authorities on the system.

Figure 19.1 Account menu

To configure user and account settings:

1. Select the ACCOUNT tab, and configure the following:
   - **USER**: Select **ADMIN** or **USER1~5.**
   - **ACTIVATE**: Select **ON/OFF** to enable the settings for the specific user type
   - **AUTHORIZATION**: Select **MONITORING**, **BACKUP**, **NETWORK**, **PLAYBACK**, **CONFIGURATION**, or **SHUTDOWN**
   - **PASSWORD**: Enter a **6-digit password** for the user
2. Press the **ENTER** button to save your settings.

DISK

Figure 19.2 Disk menu

Use the Disk menu to format the internal HDD, external USB flash drive (not included), external USB HDD, and configure Overwrite and Disk Monitor settings.

Formatting Disks

ATTENTION: You must stop all recording before attempting to format the internal HDD.

To format the internal HDD/external HDD/USB flash drive:

1. Under the DISK tab, select **FORMAT** and select **Internal HDD, USB HDD,** or **USB Memory Stick**.
2. Under ACTION, select **START**. Formatting begins. Once formatting is complete the system will reset (internal HDD *only*).
3. Press **CANCEL/ESC** to close windows (USB flash drive *only*).

Overwrite

Disk overwrite will overwrite the oldest data on the internal HDD once it full.

To enable/disable disk overwrite:

1. Under the DISK, select **OVERWRITE** and select **ON/OFF**. If OFF, the system will stop recording once the HDD is full.

   NOTE: By default, the system is set to overwrite.

2. Press the **ENTER** button to save your settings.

Disk Monitor

If enabled, Disk Monitor will alert you if the internal HDD fails.

To enable/disable disk monitoring:

1. Under the DISK tab, select **START/STOP**.
2. Press the **CANCEL/ESC** button close.

UPDATE

Figure 19.3 Update menu

Use the Update menu to upgrade system firmware.

> **NOTE:** The system supports most major brands of USB flash drives with a capacity of 10 MB ~ 16 GB.

To upgrade firmware:

1. Download the latest firmware update from the Digimerge website.
2. Copy the firmware to a blank USB flash drive.

   NOTE: Do not have any folders on the USB flash drive—just the firmware file.

3. Connect the USB flash drive to the USB port on the front panel.
4. Stop all recording on the system.

   NOTE: You must stop all recording in order to perform the upgrade.

5. Open the Main Menu and select **SYSTEM**.
6. Under the UPDATE tab, select **UPDATE**.
7. Select **START** and press the **ENTER** button. Firmware upgrade begins. *Do not* remove the USH flash drive until the upgrade process is complete. *Do not* press any buttons or power off the system during the upgrade process.

When upgrade is finished, press the **ENTER** button in the prompt window to restart the system.

INFO

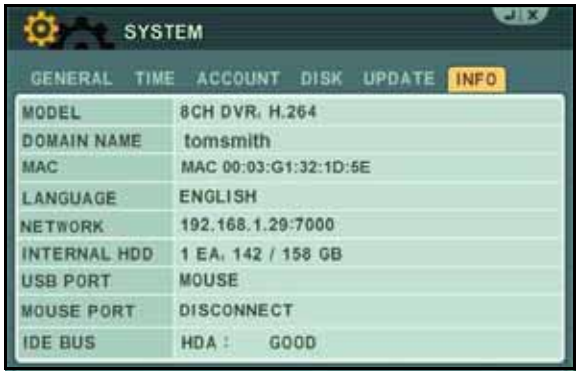


Figure 19.4 System Info menu

View important system information:

- **MODEL**: The model of the system
- **DOMAIN NAME**: Your Digimerge DDNS domain name
- **MAC**: The physical address of the DVR on your network
- **LANGUAGE**: The current system language
- **NETWORK**: The IP address of the system
- **INTERNAL HDD**: 1 HDD, size and space remaining
- **USB PORT**: The status of the USB port on the rear panel—will show "NONE" or "CONNECT"
- **MOUSE PORT**: The status of the USB mouse port on the front panel—will show "NONE" or "CONNECT"
- **IDE BUS**: The status of the HDD—will show "GOOD" or "ERROR"

BACKUP

Backup critical video data on your system to a USB flash drive, external USB HDD, or an external USB CD/DVD-RW drive (not included).

NOTE: The system supports most major brands of USB flash drives with a capacity of 10 MB ~ 4 GB. Most major brands of USB HDDs and CD/DVD-RW drives are supported.

USB Flash Drive

To backup recorded video:

1. Connect a blank USB flash drive to the USB port on the front panel.
2. Format the USB flash drive if you have not already done so. For details on formatting the USB flash drive, see "DISK" on page 30.
3. Press the **BACKUP** button on the front panel.
4. Under DEVICE, make sure to select **USB (FRONT PANEL)**.
5. Under SELECT, select specific cameras or select ALL. Select **NORMAL**, **ALARM**, or **MOTION** recording. Select all boxes if desired.
6. Under RANGE, enter date and time for the system to scan for video. If the system finds a file, it will immediately begin backing up the data. Monitor the backup progress in the ACTION frame.

Figure 20.0 Backup menu—USB flash drive

NOTE: If there is no video available in the range, the system will prompt, "STATUS: NO FILE."

7. Under ACTION, select **START** and press **ENTER**.
8. Once backup is complete, press **CANCEL/ESC** to close remaining windows.
9. You will be prompted to re-start recording on the system. Press **CANCEL/ESC** to close the prompt, and ◀◀/● to resume Continuous Recording; press ◷/▶▶ to resume Schedule Recording.

External USB HDD

ATTENTION: You must STOP ALL RECORDING on the system prior to backing up any video data to an external USB HDD or external USB CD/DVD-RW drive.

To backup recorded video:

1. Connect an external USB HDD to the USB port on the front panel.
2. Format the external USB HDD if you have not already done so. For details on formatting the external USB HDD, see "DISK" on page 30.
3. Press the **BACKUP** button on the front panel.
4. Under DEVICE, make sure to select **USB HDD**.
5. Under SELECT, select specific cameras or select ALL. Select **NORMAL**, **ALARM**, or **MOTION** recording. Select all boxes if desired.

Figure 20.1 Backup menu—USB HDD

6. Under RANGE, enter date and time for the system to scan for video. If the system finds a file, it will immediately begin backing up the data. Monitor the backup progress in the ACTION frame.

   NOTE: If there is no video available in the range, the system will prompt, "STATUS: NO FILE."

7. Under ACTION, select **START** and press **ENTER**.
8. Once backup is complete, press **CANCEL/ESC** to close remaining windows.
9. You will be prompted to re-start recording on the system. Press **CANCEL/ESC** to close the prompt, and ◀◀/● to resume Continuous Recording; press 🕒/▶▶ to resume Schedule Recording.

USB CD/DVD-RW

To backup recorded video:

1. Connect an external USB CD/DVD-RW drive to the USB port on the front panel.
2. Insert a CD/DVD-R/W disc into the drive.
3. Press the **BACKUP** button on the front panel.
4. Under DEVICE, make sure to select **USB - CD/DVD-RW**.
5. Under RANGE, enter date and time for the system to scan for video. If the system finds a file, it will immediately begin backing up the data. Monitor the backup progress in the ACTION frame.

   NOTE: If there is no video available in the range, the system will prompt, "STATUS: NO FILE."

Figure 20.2 Backup menu—USB CD/DVD-RW

6. Under ACTION, select **START** and press **ENTER**. If your backup data spans more than one disc, the system will eject the completed disc and prompt you to insert a new blank disc. Backup will continue as normal.
7. Once backup is complete, press **CANCEL/ESC** to close remaining windows.
8. You will be prompted to re-start recording on the system. Press **CANCEL/ESC** to close the prompt, and ◀◀/● to resume Continuous Recording; press ◷/▶▶ to resume Schedule Recording.

Time Search and Backup

Use the Time Search menu to set a Time Range, then use the Backup menu to backup critical video to a USB flash drive, external USB HDD, or external USB CD/DVD-RW drive (not included).

To set the Time Range:

1. Press the 🔍 button on the front panel or remote control.
2. Press ◀▶ to select the month.
3. Press▼ to move the cursor to the calendar. The date is highlighted with a black square.
4. Press ▲▼◀▶ to select dates with either Alarm, Motion, or Normal recordings and press the **ENTER** button. The detailed Time Search menu opens.
5. Press ▲▼◀▶ to select recording blocks in Hour, Minute, or Camera and then press the **ENTER** button. Recording blocks are distinguished by Alarm (red), Motion (green), and Normal (orange).

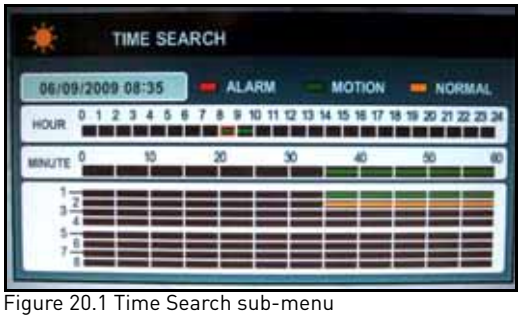


Figure 20.1 Time Search sub-menu

6. Press **-** set a START TIME. The block will turn grey.
7. Press ▲▼◀▶ to select other blocks in your desired time range. Press **+** to set the END TIME. All the block in the time range will turn grey.
8. Press **CANCEL/ESC** to exit.

To backup video:

1. Press the **BACKUP** button on the front panel.
2. Under DEVICE, make sure to select **USB (FRONT) - MEMORY STICK, USB - HDD,** or **USB - CD/DVD-RW**.
3. Under SELECT, select specific cameras or select ALL. Select **NORMAL**, **ALARM**, or **MOTION** recording. Select all boxes if desired.
4. Under RANGE, the START and END TIMES you select in the Time Search menu should appear.
5. Under ACTION, select **START** and press **ENTER**.
6. Once backup is complete, press **CANCEL/ESC** to close remaining windows.

Figure 20.2 Backup menu

Viewing Backup Video

Along with copying the files, the system adds a Backup Video Player (McdPlayer) and an AVI converter to the USB flash drive, external HDD, and external USB CD/DVD-RW drive. Use the Video Player to view the backed up video files on your PC.

NOTE: You can also view the files using the browser-based remote surveillance software.

To view backup video:

1. Connect the USB flash drive or external USB HDD with the backed up video data to your PC; or insert the CD/DVD-R/W disc into your PC's CD/DVD-RW drive.
2. McdPlayer should launch automatically. If Autorun does not start, search the drive/disc and double-click **mcdplayer.exe** to launch the Backup Video Player. McdPlayer launches and begins to load your backed up video. For more details, see "Viewing Backup Video" on page 35.

   NOTE: If the drive contains more than one video file, first select the file and click **OK**.

3. When the purple progress bar has loaded, you can begin to playback the video.
4. You can also view backup video on the DVR NetView remote client software. For details, see "Playing Backup Files" on page 54.

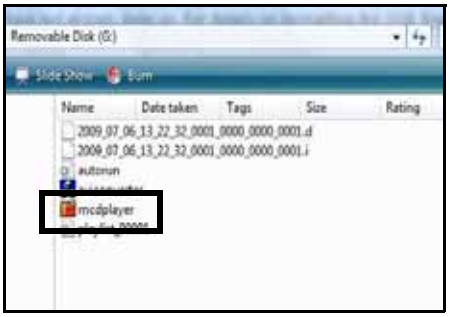


Figure 20.3 Backup video player file

Figure 20.4 Playback in McdPlayer

Using MCD Player

MCD Player is a small application that the system places on your USB flash drive when you backup critical video.

To use MCD Player:

1. Connect the USB flash drive or external HDD with the backed up video data to your PC; or insert the CD/DVD-R/W disc into your PC's CD/DVD-RW drive.
2. Double-click **mcdplayer.exe** to launch the Backup Video Player. The Video Player launches and begins to load your backed up video.

   NOTE: If the drive contains more than one video file, first select the file and click **OK**.

Figure 20.5 McdPlayer main window (image simulated)

3. When the purple progress bar has loaded, you can begin to playback the video.
4. Use the playback buttons at the top of the main screen to control playback.

   - ⏮ : Reverse playback -4X
   - ⏪ : Reverse playback -2X
   - ◀ : Reverse playback -1X
   - ⏭ : Backward step (frame-by-frame)
   - ⏯ : Forward step (frame-by-frame)
   - ▶ : Forward play 1X
   - ⏩ : Forward play 2X
   - ⏭ : Forward play 4x

5. To view full-screen, click the **number buttons**. Click the **split-screen buttons** to view Quad and multi Split-Screen.
6. Click and drag the purple playback slider to pause, advance or restart playback.
7. Click **W** to for a watermark on the file. If the file has a watermark, the following prompt will appear: "Has not been tampered with."
8. Click the **PRINT ICON** to immediately print a still frame from the video to your default printer.

   NOTE: The date and time will appear below the printed image.

DVR NETVIEW

DVR NetView is an advanced content management software (CMS) that allows live viewing, playback, and control from up to 10 DVRs simultaneously and 64 individual channels.

System Requirements

Prior to using DVR NetView, make sure your system meets or exceeds the following system requirements:

Description	Requirement
CPU	2.4 GHz Pentium® 4 or above
Operating System	Windows XP/Vista
Browser	Internet Explorer 7 or greater
Memory	1 GB RAM (more than 1 GB recommended)
Video	16 MB of video memory
HDD	2 GB of free space
Network (LAN)	10/100 Base-T Network
Network (WAN)	384 Kbps upstream*

*High-speed Internet connected recommended

INSTALLING DVR NETVIEW

To install DVR NetView:

1. Insert the software CD into your computer's CD/DVD-R drive. At the prompt, run or double-click **`NetViewInstaller.exe`**. If Autorun does not start, search your CD/DVD-R drive for **`NetViewinstaller.exe`**

   NOTE: This process refers to an installation on Windows Vista. Certain steps and images may differ in Windows XP.

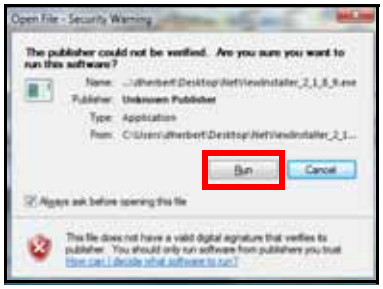
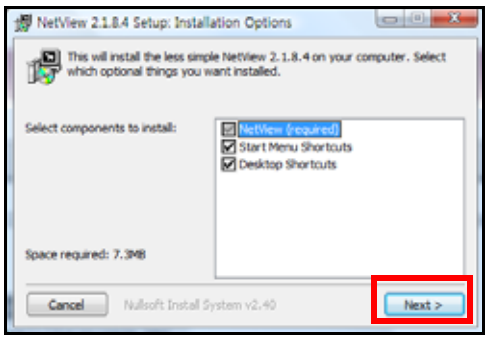


Figure 21.0 DVR NetView installation window

2. From the Security Warning window, click **Run.**
3. Click **Next** to continue the installation. Select/deselect the boxes for shortcuts if desired.
4. Click **Install** to install DVR NetView to the default location (`C:\Program Files\NetView`) or click **Browse...** to change the save location.


NetView 2.1.8.4 Setup: Installation Options
This will install the less simple NetView 2.1.8.4 on your computer. Select which optional things you want installed.
Select components to install:
NetView (required)
Start Menu Shortcuts
Desktop Shortcuts
Space required: 7.3MB
Cancel
Nullsoft Install System v2.40
Next >

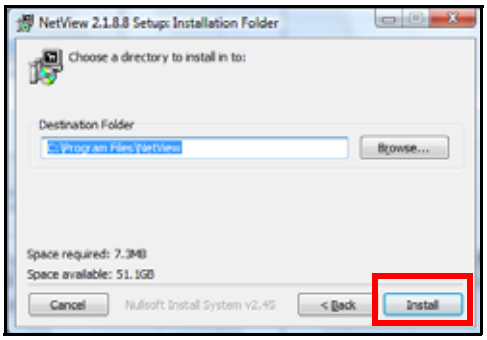
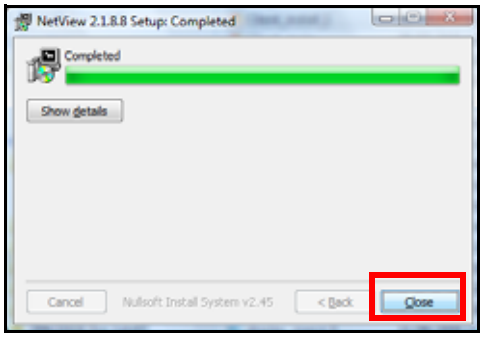


Figure 21.1 Click Next and then Install

5. Once the installation finishes, click **Close**. A shortcut icon appears on your desktop.



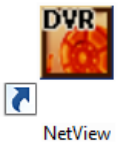


Figure 21.2 Click Close to finish the installation

USING DVR NETVIEW

With the application installed, you can open DVR NetView from the desktop icon or the Start menu.

NOTE: Make sure you have connected the system to your network and have DHCP turned ON.

To open DVR NetView:

1. Double-click the **DVR NetView icon** on the desktop or select Start>Programs>**NetView**. The DVR NetView main screen opens.

   NOTE: By default, DVR NetView opens to a black multi-screen display. You must add a DVR to DVR NetView before images will be visible on the main screen.

Figure 22.0 DVR NetView main screen

Adding a DVR

To add a DVR:

1. From the main screen, click . The Set List Manager window opens.
2. Click **Auto Scan**. Any DVRs connected to the local network will appear in the list frame.

Figure 22.1 DVR auto-detected by the Set List Manager

NOTE: From the Set List Manager window you can also perform a Remote Setup of your system. For details, see "Remote Setup" on page 59.

3. If your DVR does not appear after Auto Scan, you can add it manually to the list:
   - **SET NAME**: enter a **title** for the DVR (e.g. DVR1)
   - **IP/DDNS**: enter the **IP address** of the DVR or DDNS domain name, followed by **.digimerge.net** (i.e. tomsmith1.digimerge.net)
   - **PORT**: 7000 (default)
   - **PASSWORD**: Enter the system password (by default, 000000)
   - Click **ADD TO LIST** to save the DVR
4. Click **PROPERTY** to view the properties of your DVR.
5. Click **OK** to save your settings or click **CANCEL** to exit without saving.

You will automatically log in to this DVR when you launch DVR NetView.

Editing a DVR

To edit a DVR:

1. Select a DVR from the list frame.
2. Change the Set name, IP address, port, or password and click **APPLY**.
3. Click **OK** to save your settings.

Deleting a DVR

To delete a DVR:

1. Select a DVR from the list frame.
2. Click **DEL FROM LIST**.
3. Click **OK** to save your changes.

DVR NetView Main Screen

Figure 22.2 DVR NetView main screen

*Live images simulated.

1. **Main Display Screen**: Shows live video and playback.
2. **Screen Selector**: Single channel full-screen, quad, and multi split-screen.
3. **Mode Display**: Current mode of DVR NetView—Live or PB (Playback)
4. **Date & Time**: The date and time on the connected DVR.
5. **Mode Selector**: Click to switch between Live viewing and PB (Playback)
6. **Quick Buttons**: Record, Capture, OSD (Onscreen Display), and Setup.
7. **Playback Control**: Forward, Reverse Play, Stop, Next, Previous, and Playback Speed slider.
8. **PTZ**: Controls for a PTZ camera (not included).
9. **Audio**: Volume control and mute. Audio is available in full-screen mode only.
10. **Channel**: Camera channel number.
11. **Health**: Health report of the connected DVRs.
12. **DVR Indicator**: DVRs currently connected to DVR NetView.
13. **Virtual DVR**: Group of Virtual DVRs.
14. **Add DVR**: Add or delete a DVR.
15. **Add Virtual DVR**: Add or delete a Virtual DVR.
16. **Power**: Turn DVR NetView ON/OFF.

DVR NetView Setup

You should configure DVR NetView prior to initial use.

To use setup:

1. From the DVR NetView main screen, click **SETUP**. The Setup menu opens.
2. Under the GENRAL 1 tab, configure the following:
   - **OSD SETUP**: Choose the elements to appear on the onscreen display. Select/deselect **TIME**, **CAMERA NUMBER**, **FRAME RATE**, **SET NAME**, and **CAMERA NAME**
   - **OVERLAY** (default): It is highly recommended to keep overlay enabled for a faster video transmission. Only disable the overlay of any invalid driver is distorting the screen image. If the problem persists, reduce hardware acceleration

     NOTE: If you change the Overlay option, you will be prompted to restart DVR NetView.
   - **VIDEO MODE**: Select **NTSC** or **PAL** depending on your region (NTSC for USA, Canada; PAL for Europe)
   - **DOWNLOAD**: Choose a save location for recorded video and screen captures
   - **VERSION**: Displays the current software version of DVR NetView
3. Under the GENERAL 2 tab, configure the following:
   - **ETC**: Select **AUTO FULL SCREEN...** to display the triggered alarm channel in full-screen; select **USE AUDIO** to turn on audio transmission from an audio capable camera (not included); select **LOG DISLAY LIMIT** to cap the NetView log file to 1000 events
4. Under the PASSWORD tab, enter a new password **FOR DVR NETVIEW ONLY** (no password by default). Click **APPLY**, not OK, to save the password.

   NOTE: If changing your password at a later date, make sure to enter your old password along with your new password.
5. Under the SOUND tab, configure the following:
   - **PLAY SOUND**: Select **CONNECT**, **DISCONNECT**, for DVR NetView to make a sound when it connects/disconnects to a DVR; select **ALARM**, **MOTION**, and **VIDEO LOSS** for DVR NetView to make a sound when any of these events are triggered on the system.
6. Click **APPLY** and then click **OK** to close the Setup menu.

Figure 23.0 DVR NetView setup—General 1

Figure 23.1 DVR NetView setup—General 2

Figure 23.2 DVR NetView setup—General 2

Figure 23.3 DVR NetView setup—General 2

LIVE MODE

Once connected, you can monitor the system in real-time. You can also record, playback, and backup video from a connected DVR.

Figure 24.0 Live viewing

1. **Camera Title**: Camera number, title
2. **Time:** The current time on the DVR.
3. **DVR Status**: REC, Wait (initial connection), Loss (video loss), Close (disconnected from DVR), Alarm, Motion, PB (playback), Live (live viewing)
4. **Frame Rate**: Network transmission speed, not the FPS on the DVR.

DVR Indicators

Use the DVR Indicator list at the bottom of the main screen to check the status of connected DVRs.

- **Normal**: Blue indicator shows that the DVR is functioning properly
- **Network—Connection in progress**: Orange indicator shows that the DVR is being access through the network; click to view the connection progress
- **Network—Error/Disconnect**: Pink indicator shows that the connection to the DVR has been disrupted by a network error or invalid password. DVR NetView will try to re-establish the connection every 30 seconds. Click to determine of the problem is network or password related
- **System Abnormality**: Orange indicator shows that there has been an abnormal event or system error. Click to view the Client log list

Camera Indicators

Use the camera indicator for each connected DVR to change channels in full-screen and observe camera status.

Figure 24.1 DVR Indicator

- **Blue**: Video input is connected without recording
- **Dark Blue**: Video loss
- **Red**: Actively recording

Display Views

- Click the display mode buttons to the right of the main display screen to view channels in full-screen, quad, and various split-screen configurations
- If you have multiple systems connected, click buttons **25**, **36**, **49**, and **64** to view the in large split-screen modes
- Double-click any channel to view it in single channel full-screen; double-click again to return to the previous split-screen mode
- While in split-screen, you can right-click any channel and select **FULL SCREEN** to view that channel in single channel full-screen mode

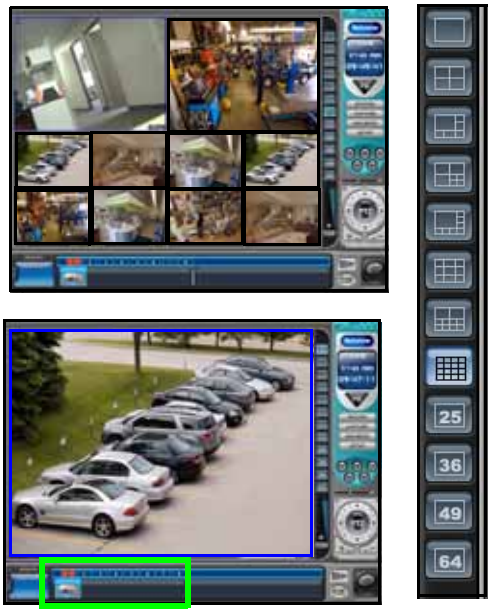


Figure 24.2 Display modes

Changing Channels

If viewing a a system in full-screen, you can change channels while in full-screen.

- Select your system from the DVR list at the bottom of the main screen
- Double-click any of the displayed channels to view that channel in full-screen—active channel will be highlighted in red
- Click and drag a channel to another desired location

Onscreen Display

- Click OSD MODE to show/hide the onscreen display

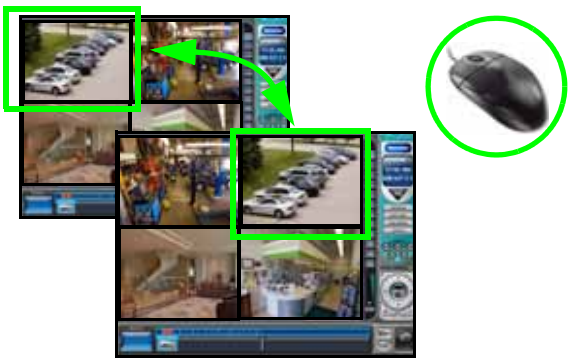


Figure 24.3 Click and drag channels in DVR NetView

Sub-Menu

Use the sub-menu from the DVR list to quickly access short-cuts to pertinent information.

To open the sub-menu:

1. Select a DVR from the DVR List at the bottom of the main screen.

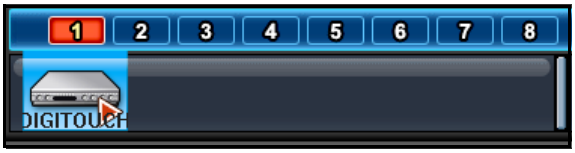


Figure 17.4 DVR list

2. Right-click the DVR to view the sub-menu.

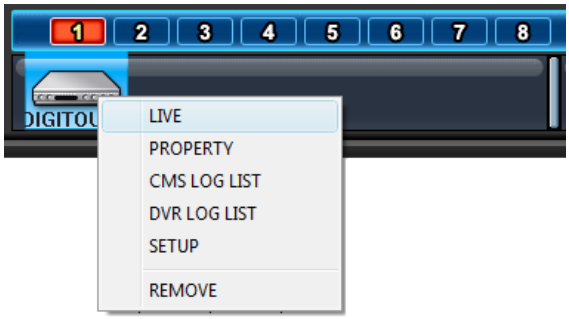


Figure 24.4 Sub-menu

3. From the sub-menu, select any of the following:
   - **LIVE**: Resume live viewing in the previous split-screen configuration
   - **PROPERTY**: Open the Properties menu for the selected DVR
   - **CMS LOG LIST**: Open the CMS log
   - **DVR LOG LIST**: Open the DVR log
   - For details on properties and log lists, see “Appendix N: DVR Properties and Log Files” on page 90.
   - **SETUP**: Open the Setup menu. For details, see “Remote Setup” on page 59.
   - **REMOVE**: Remove the selected DVR from the DVR List
     - If you select REMOVE, click **OK** in the confirmation window to remove the DVR, or click **Cancel**

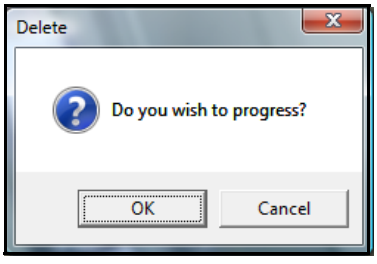


Figure 24.5 DVR delete

4. Click anywhere on DVR NetView to close the sub-menu.

Health

DVR NetView features an onscreen indication of the health of your connected DVRs. The Health indicator icon displays the names of the last five DVRs to experience any problems or events. The color of the Health Indicator icon will change depending on the errors reported by the DVR.

- **Blue**: The DVR is functioning properly. The name of the DVR is only displayed during record, backup, and schedule.
- **Yellow**: Events and problems on the DVR are detected—video loss, video loss recover alarm detect, motion detect, record stop, schedule off, backup operation stop.
- **Red**: Critical functions of the DVR have failed—connection fail, connection time out, disconnected power fail, HDD fail, power fail recover, system fail recover, and HDD fail recover.

Clearing Health Status

To clear the health status (return to blue indicator):

1. Double-click the **Health Indicator icon**. The Health Report Opens.
2. View the Health Report.
3. Click **OK**. The Health Report closes and the Health Indicator returns to blue.

Health Report

The Health Report provides a quick overview of each system. You can check the status of various system components (up to 300).

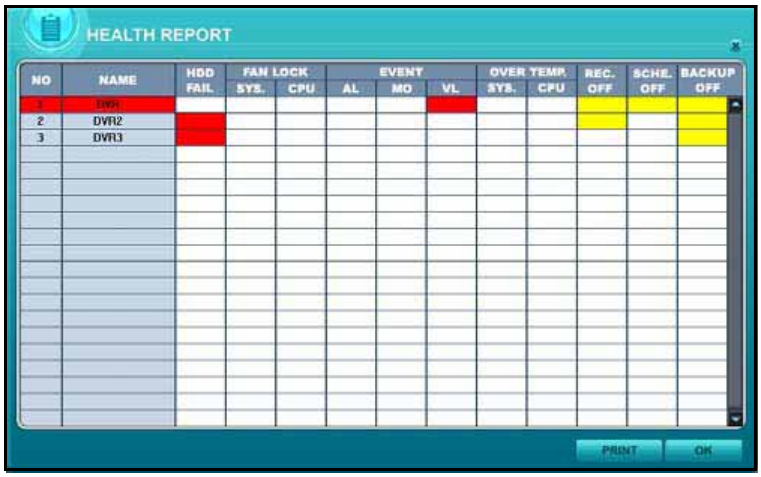


Figure 26.0 Health Report main window

To view the health report:

1. Double-click the **Health Indicator icon** at the bottom of the main screen.
2. Double-click the DVR name in the Health report to view the DVR properties and CMS log file.
3. Click **PRINT** to print the health report or click **OK** to close the window.

Health Report Color Codes

Block Color	Condition
Solid RED	An event or a problem had occurred.
Blinking RED	A current event or problem.
Solid YELLOW	Current status of the DVR.

Health Report Conditions

- **HDD FAIL**: HDD failure.
- **EVENT**: AL=alarm, MO=motion, VL=video loss
- **OVER TEMP**: NOT SUPPORTED IN THIS MODEL.
- **REC. OFF**: Indicates REC LED ON/OFF on the DVR.
- **SCHE. OFF**: Indicates SCHEDULE LED ON/OFF on the DVR.
- **BACKUP OFF**: Indicates the Backup status of the DVR.

PTZ

If you have PTZ cameras (not included) connected to your system, click **PTZ** to view the PTZ control menu.

The PTZ control includes the following:

1. **Navigation buttons**: Click ▲▼◀▶ to pan and tilt the camera.
2. Click to switch between Full PTZ control and Compact PTZ control
3. **+ / -** : Click to zoom in/out
4. **Focus**: Focus near (**+**), Focus far (**-**), Auto Focus (**A**).
5. **Iris**: Open (**+**), Close (**-**), Auto Iris (**A**).
6. **Tour**: Set Tour, Go To, call preset, Auto Tour.
7. **Special Function**: Various functions will depend on the PTZ camera.
8. **Pan/Tilt Boundary**: Set Auto Pan to Left boundary, Auto Pan to right boundary, and Tour.
9. **ME, Speed Up/Down**: M=menu, E=escape; Increase/decrease speed
10. **Power**: Power for Auto Pan/Auto Tilt; stand-by Pan/Tilt; turn PTZ light on/off

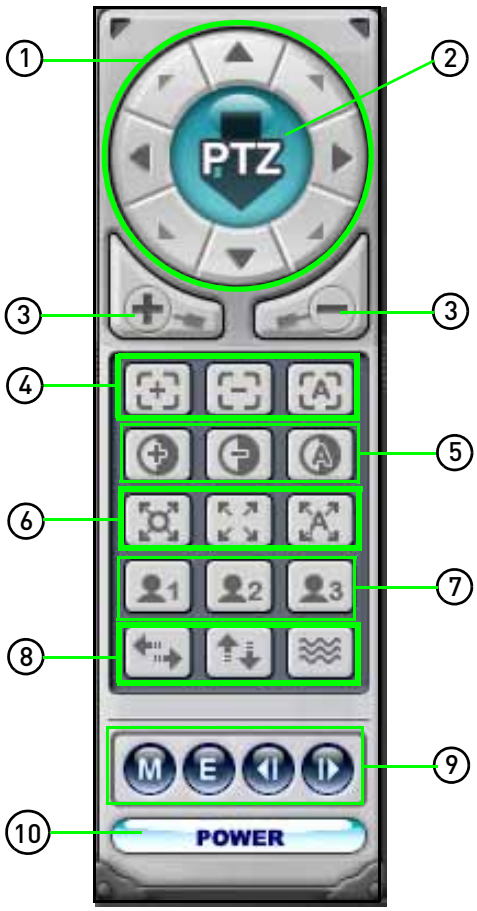


Figure 27.0 PTZ control

RECORDING

You can instantly record live video to your PC using DVR NetView.

NOTE: Recording does not have to be enabled on the DVR for you to record onto your PC.

Figure 28.0 Recording directly to PC

To record live video:

1. From live viewing, select a DVR from the DVR Indicator list at the bottom of the main screen.
2. Click

. The system immediately begins recording live video from the selected DVR to your PC. The RECORD button will remain light blue while DVR NetView is recording.
3. Click **RECORD** again to stop. The RECORD button quickly flashes dark blue to indicate recording has stopped.
4. By default, files are saved to `C:\Program Files\NetView\Download`. To change the location click **SETUP** to open the DVR NetView Setup menu. For more details, see "DVR NetView Setup" on page 42.

You can playback the recorded video files using Playback Mode in DVR NetView. For more details, see "Local Playback" on page 53.

Remote Recording

You can start/stop all recording on your system using Remote Setup in DVR NetView. For details, see "CONTROL" on page 66.

PLAYBACK

Use Playback mode (PB) to view recorded video on a connected DVR or download the video to your PC

NOTE: While in Playback mode, only one of the connected DVRs can be accessed at a time.

To activate playback:

1. Click PB. DVR NetView switches to Playback Mode.

Figure 29.0 Playback mode (default)

2. Click **SEARCH** at the bottom of the main screen. The Remote Search menu opens.

Figure 29.1 Remote Search menu)

3. Select a DVR from the DVR Set List at the top of the window. The dates with recorded video are highlighted in the calendar.
4. Click **REMOTE** or **LOCAL**. Remote is for video on the DVR, local is for video recorded directly to your PC.

Remote Playback

To use remote playback:

1. Click **REMOTE** and then select a DVR from the Set List. The dates with recorded video are highlighted in the calendar: **RED**=alarm, **GREEN**=motion, **YELLOW**=normal.
2. Select a date in the calendar. Hour and minute blocks for the video appear in the time field (see figure 29.2).

Figure 29.2 Remote Playback—time blocks

3. Click time blocks for **Hour** and **Minute**.
4. Click and drag the green cursor in the minute field to set a longer playback time.
5. Click **PLAY**. Playback immediately begins in the main screen.

Playback Controls

Control playback with the following buttons:

- **Playback**:
  - Reverse playback
  - Stop
  - Forward playback
  - Reverse frame-by-frame (click repeatedly)
  - Forward frame-by-frame (click repeatedly)
- **Playback speed slider**: Pause=center; 1X, 2X, 4X, 8X forward and -1X, -2X, -4X, -8X reverse
- **Cameras**: click to view the camera channel in full-screen (active channel is highlighted in green)

Remote Download

Remote Download allows you to download and save video from your system directly to your PC.

To use remote download:

1. From the Remote Search window, click **REMOTE** and select a DVR from the Set List.
2. Select a date in the calendar. Hour and minute blocks for the video appear in the time field.

Figure 29.3 Remote Playback—time blocks

3. Click time blocks for **Hour** and **Minute**.
4. Click and drag the green cursor in the minute field to set a longer playback time.
5. Click **DOWNLOAD**. The default save location is `C:\Program Files\NetView\Download`. Open the DVR NetView Setup menu to change the save location. For details, see "DVR NetView Setup" on page 42.

Figure 29.4 Download window

NOTE: File transfer may take several moments, depending of the size of the file.

6. When the transfer is complete, click **OK** to close the window.
7. Click

to return to live viewing.

Local Playback

View video you have recorded directly to your PC, video you have downloaded to your PC, or video you have copied to a USB flash drive.

To use remote playback:

1. Click **LOCAL** and then select a DVR from the Set List. Video on your PC is highlighted on the on the calendar: RED=alarm, GREEN=motion, YELLOW=normal.
2. Select a date in the calendar. Hour and minute blocks for the video appear in the time field.

Figure 29.5 Local Playback—PC options

3. Click time blocks for **Hour** and **Minute**.
4. Click and drag the green cursor in the minute field to set a longer playback time.
5. For playback, click **PLAY**.
6. For PC options, click the following:
   - **DELETE**: Delete the selected file. Click **YES** in the confirmation window to delete
   - **SAVE AS**: Save the file to a new location on your PC; browse for the location and click **OK**
   - **OPEN FILE**: View video recorded directly to your PC, downloaded to your PC from a DVR, or backup video copied to a USB flash drive—Select the **CMS file** and click **Open**. Playback begins in the main screen

File Naming Conventions

Files saved by DVR NetView carry the following naming convention:

`yyyy_mm_dd_hh_mm_ss_channel#_channel#_channel#_channel#.cms`

Playing Backup Files

To play files backed up to a USB flash drive:

1. Connect a USB flash drive (not included) to your PC.
2. Open DVR NetView on your PC.
3. Open **Playback Mode** and click **SEARCH**.
4. Click **LOCAL** and select a DVR from the Set List.
5. Select a file from the calendar and time fields.
6. Click **OPEN FILE**.

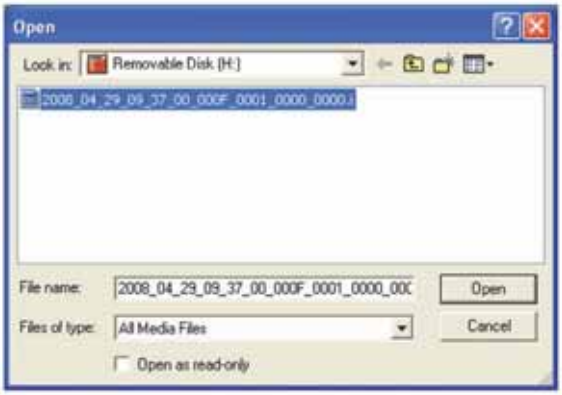


Figure 29.6 Open file dialogue window

7. Select a **CMS** file and click **Open**. The file immediately begins playing in the DVR NetView main screen.
8. You can also play files on the MCD Player loaded onto the USB flash drive during backup. For more details, see "Viewing Backup Video" on page 35.

VIRTUAL DVR

Virtual DVR is a unique feature of DVR NetView that can help you manage **multiple DVRs**. A Virtual DVR is not an actual DVR system, but represents a group of many DVRS already listed in the DVR Indicator window. For each Virtual DVR set, up to 64 DVRs can be added, using one camera from each DVR. The Virtual DVR behaves in the same manner as real DVR, save for the warning notifications.

ATTENTION: If you are only using one DVR with DVR NetView, please skip this section.

Creating a Virtual DVR

Use the Virtual Set List Manager to help you create a Virtual DVR.

To create a Virtual DVR:

1. From the DVR NetView main screen, click (**Add Virtual DVR**). The Virtual DVR Set List manager opens.

Figure 30.0 Virtual DVR Set List Manager

2. Under NAME, enter a title for your Virtual DVR. For example, **GROUP1**.
3. Click **ADD VIRTUAL SET**.
   NOTE: APPLY is only used to edit changes to an existing Virtual DVR. Click APPLY, then OK.
4. Optional: select the following options:
   - **Auto Arrange**: NetView will arrange cameras with any events occurring from a Virtual DVR with registered cameras—cameras with triggered events are moved to channel 1, then arranged in order of priority
   - **Auto Insert & Arrange**: NetView will add, prioritize and arrange cameras with any of the events occurring from any cameras
   - **Alarm, Motion, Video Loss**: Select these options to have cameras with alarm, motion, or video loss triggers be prioritized and arranged automatically in Auto Arrange or Auto Insert & Arrange
5. Click **OK** to save the Virtual DVR and close the window.

Editing a Virtual DVR

To edit a Virtual DVR:

1. Select a Virtual DVR from the list frame.
2. Change the Name and select options and click **APPLY**.
3. Click **OK** to save your settings.

Deleting a Virtual DVR

To delete a Virtual DVR:

1. Select a DVR from the list frame.
2. Click **DEL FROM LIST**.
3. Click **OK** to save your changes.

Virtual DVR Properties

- From the Virtual DVR Set List Manager window, click **PROPERTY** to open the Property menu.

The Property menu displays information about your Virtual DVR: name, total number of connected DVRs, total numbers of connected cameras and IP information.

Figure 30.1 Virtual DVR Property menu

Configuring a Virtual DVR

Once you have created a Virtual DVR, you can register DVRs and cameras to that Virtual DVR.

To configure a Virtual DVR:

1. From Live viewing, double-click a Virtual DVR icon from the Virtual DVR Indicator at the bottom of the main screen. The ▶ indicator appears on the icon and a blank split-screen appears on the main screen.

Figure 30.2 Virtual DVR Indicator

2. Use the Split-screen selector in the right of the main screen to a select a split-screen mode.
3. Drag a DVR from the DVR Indicator to a desired location on the screen.
4. Add DVRs to the Virtual DVR:
   - Click and drag a DVR from the DVR Indicator to a desired channel on the screen

   NOTE: Cameras will be added in numerical order from the selected channel to the end, depending on the number of cameras connected to the DVR

   OR

4. Add cameras to the Virtual DVR:
   - Select a DVR from the DVR indicator
   - Drag specific cameras to a desired channel on the screen

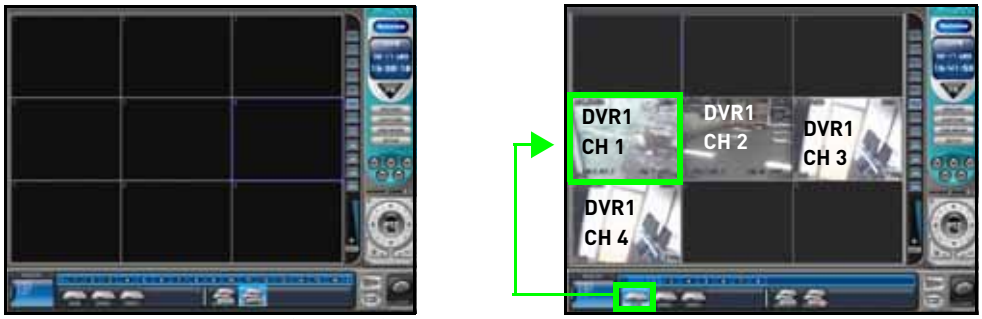


Figure 30.3 Add a DVR—DVR1 (4CH DVR) is added to channel 4 on the screen

Figure 30.4 Add a Camera—CH 1 from DVR 2 is added to channel 8 on the screen

NOTE: The newly selected camera will replace the existing camera if there is a conflict.

Deleting Cameras from a Virtual DVR

To delete a camera from a Virtual DVR:

1. Double-click a Virtual DVR icon from the Virtual DVR indicator.
2. From live viewing, right-click a camera and select **REMOVE**.

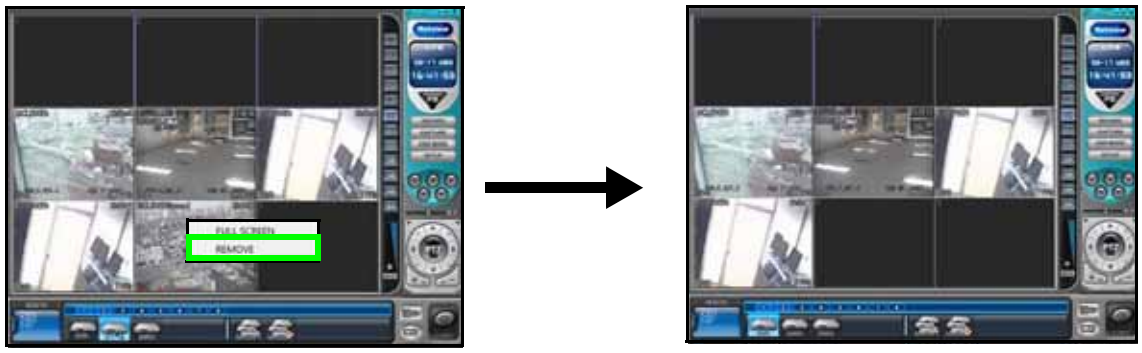


Figure 30.5 Right-click and select REMOVE

OR

2. Drag the camera back to the DVR icon in the DVR Indicator.

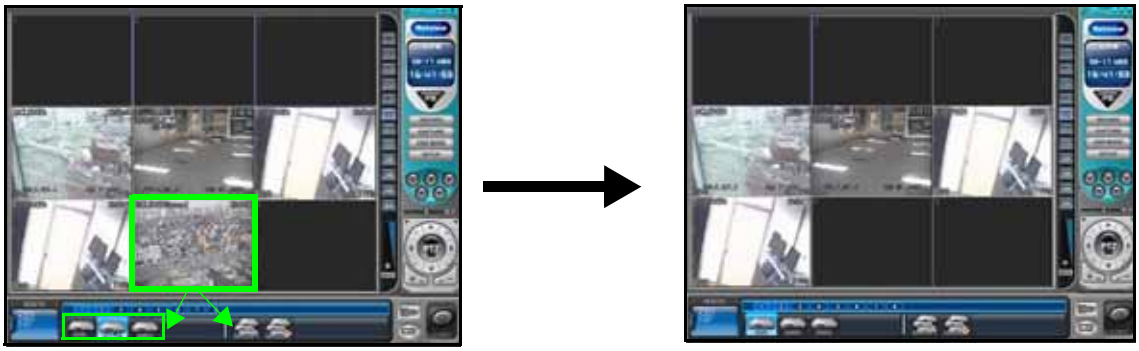


Figure 30.6 Drag the camera to a DVR or different Virtual DVR

REMOTE SETUP

Use DVR NetView to remotely configure connected DVRs.

To open remote setup:

1. From the DVR NetView main screen, right-click a DVR icon from the DVR Indicator and select **Setup**. The Display window opens.

   NOTE: You can also open Remote Setup from the Set List Manager menu.

Figure 31.0 Remote Setup menu

2. Click the buttons on the left side of the main screen to configure the following options:
   - **Display**
   - **Camera**
   - **Motion**
   - **Record**
   - **Alarm**
   - **Schedule**
   - **Network**
   - **System**

DISPLAY

Figure 32.0 Display options

To configure Display options:

1. Under the DISPLAY SETUP tab, configure the following:
   - **STATUS BAR**: Select to Show or Hide the status bar on the OSD.
   - **CAMERA**: Select to show the CAMERA NO. or the CAMERA TITLE or both.
   - **BORDER LINE**: Set the color for the borders of the OSD: WHITE, BLACK, DARK GREY, or GREY
   - **BACKGROUND**: Set the background color for disconnected cameras on the main display: GRAY, WHITE, BLUE, or DARK GREY
2. Click **APPLY** and then **OK** to save your settings and close the window.

Sequential Setup (Auto Sequence)

To enable sequential setup:

1. Under the SEQUENTIAL SETUP tab, configure the following:
   - **DWELL TIME**: Set from 1~30 seconds.
   - **SEQUENTIAL MODE**: Set the display mode, from single channel full-screen to 8-channel split-screen

     NOTE: You *must* select one of these display modes to enable Auto Sequence mode. If none of these modes are selected, Auto Sequence *will not* begin.
   - **FULL SCREEN MODE**: Select channels for full-screen display. If selected, these channels will appear in full-screen during Auto Sequence mode
2. Click **APPLY** and then **OK** to save your settings and close the window.

With at least one Sequential Mode option selected, Auto Sequence will begin on the DVR **only**.

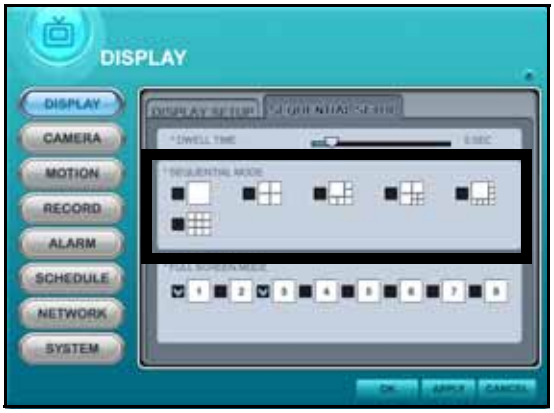


Figure 32.1 Sequential Setup

To disable sequential setup:

1. Deselect all options under Sequential Mode.
2. Click **APPLY** and then **OK** to save your settings and close the window.

CAMERA

Figure 33.0 Camera options

To configure Camera options:

1. Select a **camera icon** at the top of the window.
2. For the selected camera configure the following:
   - **COVERT**: Select **YES**/**NO**. If YES, the camera channel will be obscured from live viewing to give the impression that no camera is recording. Use this option if the display monitor is in public view.

     NOTE: The Covert channel will use the same background color as a disconnected camera. To change the background color, see see "DISPLAY" on page 60.
   - **BRIGHTNESS**, **CONTRAST**, **COLOR**: Adjust from **0~100**.
   - **TITLE**: enter a name/title for the camera
   - **PTZ MODEL**: Select the model of your connected PTZ camera from the drop-down menu
   - **PTZ ID**: Enter your PTZ ID (PTZ ID should match the camera channel to which you have connected the PTZ camera)
3. Repeat steps 1~2 for any remaining cameras.
4. Click **APPLY** and then **OK** to save your settings and close the window.

MOTION

Figure 34.0 Motion options

To configure Motion options:

1. Under RECORD TIME, adjust the time from **10**~**300** seconds.

   NOTE: The set recording time is applicable to all channels.
2. Under CAMERA SELECT, select a **camera icon**.
3. Under SENSITIVITY, and adjust from **1~20**. The higher the number, the greater the sensitivity.
4. Under MOTION GRID, click one of the **grid icons** to apply a motion grid to the selected camera.

   NOTE: Disabled blocks are colored *grey*. Active blocks will be *turquoise-colored* when motion is detected.

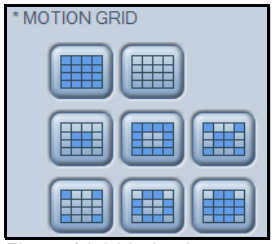


Figure 34.1 Motion icons

5. Repeat steps 1~4 for any remaining cameras.
6. Click **APPLY** and then **OK** to save your settings and close the window.

RECORD

Figure 35.0 Record options

To configure continuous recording options:

1. Select a camera.
   NOTE: Number of displayed cameras depends on model number of your system.
2. For each camera configure the following:
   - **USE**: Select **ON**/**OFF**. If OFF, the selected camera(s) will not record.

     NOTE: The system will automatically reset if you enable/disable any cameras.
   - **QUALITY**: Select **LOW**, **MIDDLE**, **HIGH**, **SUPER**, and **ULTRA**.
   - **RATE**: Select **1**, **2**, **3**, **4**, **5**, **6**, **7**, **10**, or **15** fps.
   - **AUDIO**: Select **ON**/**OFF**. Audio capable cameras or microphones are required for audio recording.
   - **MOTION**: Select **ON**/**OFF**. If Motion is set to ON, the system will only record from the selected camera when motion is detected.

   NOTE: Motion Grid and sensitivity must be configured in the Motion menu. See "MOTION" on page 61.
3. Click **APPLY** and then **OK** to save your changes and close the window.

ALARM

Figure 36.0 Alarm options

To configure alarm settings:

1. Under RECORD SETUP, configure the following:
   - **USE**: Select **ON**/**OFF**. If OFF, the selected camera(s) will not record.
   - **QUALITY**: Select **LOW**, **MIDDLE**, **HIGH**, **SUPER**, and **ULTRA**.
   - **RATE**: Select **1**, **2**, **3**, **4**, **5**, **6**, **7**, **10**, or **15** fps.
   - **AUDIO**: Select **ON**/**OFF**. The number of audio input channels varies by model.
   - **INPUT**: Select **N.O**/**N.C**.
2. Under ALARM SETUP, configure the following:
   - **RECORD TIME**: Set from **10~300 seconds** (in increments of 10 seconds).
   - **RECORD CAMERA**: Select **ALL** or **1:1**. If you select ALL, the system will record on all channels; if you select 1:1, the system will only record for the designated channel
   - **ALARM BUZZER**: Select **ON/OFF**. If ON, the system will sound a beep when the external alarm is triggered
3. **ALARM OUT1**: Set the type of Alarm Out video (external monitor required, not included). Select **SYSTEM**, **VIDEO LOSS**, **MOTION**, **ALL ALARM**, or **ALARM IN1~8**, and then select **ON**/**OFF**
4. Click **APPLY** and then **OK** to save your settings and close the window.

SCHEDULE

NOTE: Daily has priority over a Weekly schedule.

Figure 37.0 Schedule options

To set a recording schedule:

1. Select **MODE1** (red), **MODE2** (orange), **MODE3** (green), or **MODE4** (blue) and configure the following:

Figure 37.1 Mode tab options

- **USE**: Select **ON**/**OFF**. If OFF, the selected camera(s) will not record.
- **QUALITY**: Select **LOW**, **MIDDLE**, **HIGH**, **SUPER**, and **ULTRA**.
- **RATE**: Select **1**, **2**, **3**, **4**, **5**, **6**, **7**, **10**, or **15** fps.
- **AUDIO**: Select **ON**/**OFF**. Audio channels vary by model.
- **MOTION**: Select **ON**/**OFF**

Figure 37.2 Daily schedule input

2. Select the **CHART tab** and select **ALL**, **SUN**, **MON**, **TUE**, **WED**, **THU**, **FRI**, or **SAT**. The Schedule sub-menu opens.
3. Enter **BEGIN** and **END** times, and select the **MODE** for ten time slots and click **OK**.
4. Click **APPLY** and then **OK** to save your settings and close the window.

NOTE: You must enable scheduled recording directly on your system. DVR NetView will only let you edit and configure the recording schedule(s).

NOTE: For an example on setting a recording schedule, see “Overnight Recording” on page 26.

NETWORK

Figure 38.0 Network information

The Network displays network information in a "General" tab and email options in an "Email" tab.

To view network information:

1. Select the GENERAL tab (default) and view the following:
   - **CONFIG**: Displays your current networking configuration—by default, DHCP
   - **IP SETUP**: Displays your current IP address, gateway, subnet mask, and port (by default, 7000)
2. Under BANDWIDTH, select the following from the drop-down menu: **64 KBPS**, **128 KBPS**, **256 KBPS**, **512 KBPS**, **1 MBPS**, **2 MBPS**, **4 MBPS**, **8 MBPS**, or **UNLIMITED**.
3. Click **APPLY** and then **OK** to save your settings and close the window.

EMAIL

Figure 38.1 Email options

To configure email options:

1. Enter up to **five email addresses** in E-MAIL field 1~5. They will be the email addresses that receive the email notifications from the DVR.
2. Under EMAIL USE, select **DEFAULT** (recommended) or **SMTP**. If you select DEFAULT, go to step 8. If you selected SMTP, go to step 3.
3. Under SMTP SERVER, enter **your SMTP email server**.
4. Under SMTP PORT, enter **your SMTP port**.
5. Under SMTP AUTH, select **ON**.
6. Under SMTP USER ID, enter **your SMTP user name**.
7. Under SMTP PASSWORD, enter **your SMTP password**.
8. Click **APPLY** and then **OK** to save your settings and close the window.

DDNS

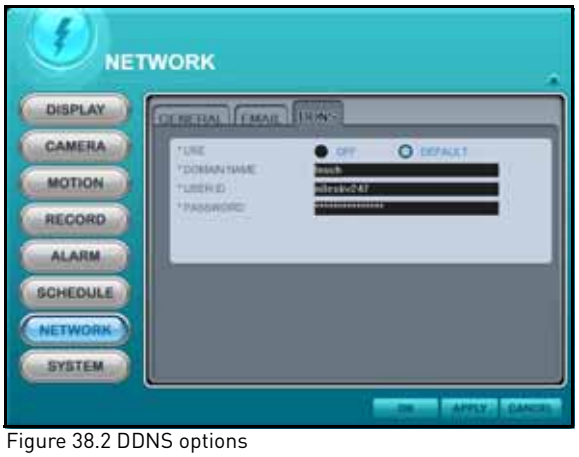


Figure 38.2 DDNS options

To configure DDNS options:

1. Under USE, select **DEFAULT**.
2. Under DOMAIN NAME, enter your **Digimerge DDNS domain name** from the confirmation email.
3. Under USER ID, enter your **Digimerge DDNS user name/ID**.
4. Under PASSWORD, enter your **Digimerge DDNS password**.
5. Click **APPLY** and then **OK** to save your settings and close the window.

SYSTEM

Figure 39.0 System options—General

To configure general system options:

1. Select the GENERAL TAB (default) and configure the following:
   - **AUTO KEY LOCK**: Select **ON/OFF**. If ON, the front panel touch-screen will be disabled after 3 minutes of inactivity. Enter your system password (by default, 000000) to disable
   - **KEY TONE**: Select **ON/OFF**. If ON (default), the system will "beep" whenever a button is pressed on the front panel or remote control
   - **OVERWRITE**: Select **ON/OFF**. If ON, the system will overwrite the earliest recorded video on the hard disk when the HDD is full
   - **RESOLUTION**: From the drop-down menu select **CIF 4CH**, **FIELD 4CH**, **FRAME 4CH**, **CIF 8CH**, **FIELD 8CH**, **FRAME 8CH**, or **CIF + FRAME**.

   NOTE: Recording must be stopped on the DVR in order to change the resolution.

   NOTE: Resolution may vary by model.
2. Click **APPLY** and then **OK** to save your settings and close the window.

TIME

Figure 39.1 System options—Time

To set the time:

1. Stop all recording on the DVR. To stop recording remotely, select the Control tab from the System menu and click **RECORD STOP**.
2. Select the TIME tab and configure the following:
   - **DATE**: Enter a **date**
   - **TIME**: Enter a **time**
3. Click **APPLY** and then **OK** to save your settings and close the window.

PASSWORD

N/A

CONTROL

Figure 39.2 System options—Control

The Control tab allows you to start and stop the primary functions of the system.

To control the DVR:

1. Select the CONTROL tab.
2. Click **STOP RECORD** to stop continuous recording on the system. Click **START RECORD** to resume continuous recording.
3. Click **SCHEDULE ON** to enable/disable scheduled recording. The button will be highlighted in light blue when scheduled recording is enabled.

   NOTE: A recording schedule must already be entered on the system prior to enabling/disable schedule recording remotely. For details on setting a recording schedule, see "SCHEDULE" on page 25.
4. Click **ALARM 1** to enable/disable the alarm.
5. Click **APPLY** and then **OK** to save your settings and close the window.

APPENDIX A: SYSTEM SPECIFICATIONS

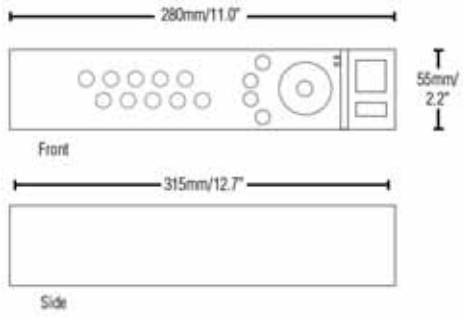
DVR

Description	Specification
Video Input	4/8/16 x 1.0Vp-p, CVBS, 75ohms, BNC
Video Output	1 composite (BNC) 1 spot output, programmable 1 VGA
Audio Input	1 x line-in (RCA)
Audio Output	1 x line-out (RCA)
Audio	1-way audio conference (via network)
Video Compression	H.264 hardware codec
Audio Compression	G.711
Supply Voltage	100VAC - 240VAC, 12VDC , 3A, 50/60Hz
Power Consumption	Approx. 19.2 watts (HDD 250GB)
Operating Temp. Range	-32°~104° F / 0° ~ 40° C
Hard Disk Capacity	1 HDD (Max 2TB), 100% duty cycle
Operating System	Linux (embedded)
OSD Navigation	USB mouse, IR controller, or 20 key front panel
Backup	via USB to flash and optical drives
Backup File Format	Embedded player; convertible to AVI
Recording Resolution	360 x 240 : 120/100 (NTSC/PAL) 720 x 240 : 60/50 (NTSC/PAL) 720 x 480 : 30/25 (NTSC/PAL)
Image Size	5-30 KB (720x480, 720x576) FPS 3-19 KB (720x240, 720x288) FPS 2-12 KB (360x240, 360x288) FPS
Record Scheduling	Daily, Weekly; adjust specific HR per channel
Pre/Post Alarm recording	5 seconds (Pre); 5 minutes (Post), programmable per camera

DVR (cont'd.)

Description	Specification
Event/Log Search	Unlimited for user login/out, configuration changes, remote access, connects/disconnects
Playback	Single, Quad, 8, 16 CH Simultaneous
Alarm Input	4/8/16 x TTL, programmable as NC/NO
Alarm Output	1 x Relay with NO/NC contact; 24VDC/2A, 240VAC/2A resistive
Activity Detection	Sensitivity levels: 20
PTZ Control	RS-485/RS-422 Interface
Mobile Viewing	3G Smart Phone view and control
Front Key	Max 20 (Touch Sensor)
Front LED	Power, REC, HDD
Unit Weight	1.91 kg/4.2 Lbs
Remote Functions	Live View, Live Recording, Search, Set-up, Backup
Network Speed Control	8 levels (64KB ~ 8MB)/sec.
Network Protocol	TCP/IP, DDNS and Web
Network Interface	10/100-Base-TX, RJ-45

Dimensions



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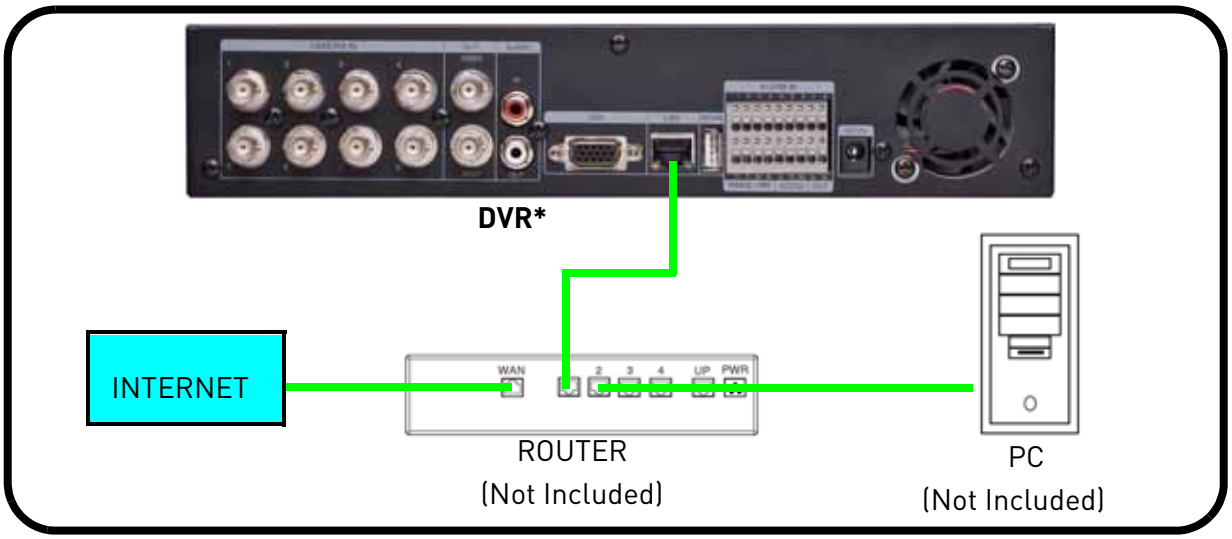
APPENDIX B: SETTING UP REMOTE VIEWING

Setting up the Remote Viewing Feature requires several steps. Networking skills are required to correctly configure the remote viewing functions.

What Do I Need?

- DVR System
- A PC with the installed DVR NetView software
- A router (not provided with the system) and High Speed Cable or DSL Internet Connectivity (for remote viewing outside your network)



*8-channel model shown.

Network Setup / Remote Access Overview

To setup remote viewing:

1. With the system powered off, connect the system to the router using an Ethernet cable.
2. Power the system on. You must connect the system to the router prior to turning on the system. This allows the system and router to communicate over the network.
3. Press and hold the Enter button on the front panel to find your system's IP address.
4. Enable Port Forwarding on your router. Refer to the included Router Guide and Basics of Remote Video Access Guide for further assistance with your specific network setup and hardware.
5. Setup an account at http://ddns.digimerge.net

How Do I Find My IP and MAC addresses?

The IP and MAC address of your system are necessary for DDNS setup. DDNS allows you to view and control your system from a remote location.

Figure 40.0 DVR Status screen

To find your IP and MAC addresses:

1. Open the MAIN MENU and select **SYSTEM**.
2. Under the **INFO tab** you will find your system's IP address and MAC address.

Finding Your External IP Address

If you wish to find your external IP address, you can use a third-party website such as www.showmyip.com

Your external IP address can also be found within your Router settings. Refer to your router user guide for further details.

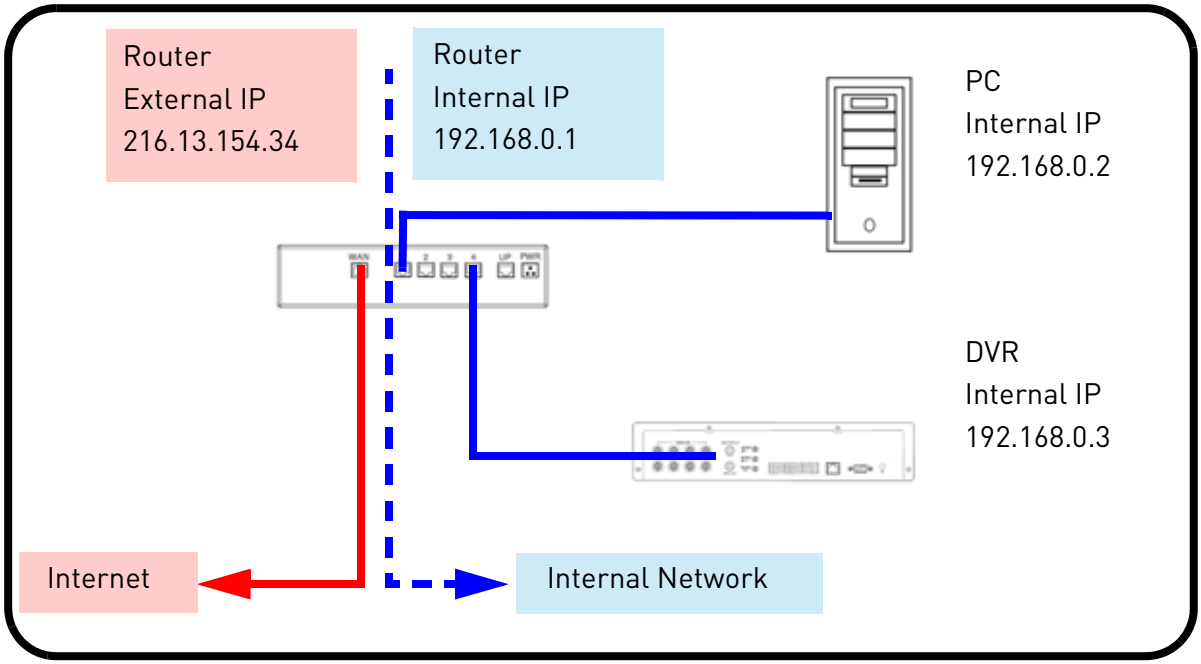
How Do I Enable Port Forwarding?

You need to enable port forwarding on your router to allow for external communications with your system for the following port:

- **7000**

Computers, DVRs, and other devices inside your network can only communicate directly with each other within the internal network. Computers and systems outside your network cannot directly communicate with these devices. When a system on the internal network needs to send or receive information from a system outside the network (i.e. from the Internet), the information is sent to the router.

NETWORK EXAMPLE



When a computer on the Internet needs to send data to your internal network, it sends this data to the external IP address of the Router. The Router then needs to decide where this data is to be sent to. This is where setting up Port Forwarding becomes important.

Port Forwarding tells the router which device on the internal network to send the data to. When you set up port forwarding on your Router, it takes the data from the external IP address:port number and sends that data to an internal IP address:port number (i.e. Router External IP 216.13.154.34 to DVR Internal IP 192.168.0.3:7000).

The instructions found online in the Router Configuration Guides will assist you in the port forwarding configurations for a selection of different router models. Visit our Consumer Guides Support website at http://www.digimerge.com/ for more details.

APPENDIX C: SETTING UP DDNS SERVICE

Digimerge offers a free DDNS service for use with your DVR. A DDNS account allows you to set up a web site address that points back to your local network. The following outlines how to set up your free DDNS account.

To setup your free Digimerge DDNS account:

1. In your browser, go to http://ddns.digimerge.net and click **Create Account**.
2. Complete the Account Information fields with your personal information. Complete the Warranty Information with your purchase details (optional).
3. Complete the System Information fields:
   - **Product License**: Select your product model from the Product License drop down menu (e.g. VB300)
   - **←Product Code→ - ←MAC Address→**: Locate the MAC address of your (recorded while loading the System)
   - **URL Request**: Choose a URL for your DDNS connection (i.e. your name, your company or business name, or anything of your choice.)
4. Once the information has been entered, click **Create New Account**.
5. Your Account information will be sent to you at the email Address you used in Step 2.

Figure 41.0 Create a DDNS account

Figure 41.1 Enter personal information

Figure 41.2 System information

You will need this information for remote access to your system. Record your information below:

Username: _

Domain name*: _

Password: _

* Only the first part of the Domain Name is required for setup on the system. For example, if the full domain sent is *tomsmith.ddns.digimerge.ne*t, you only need to enter tomsmith on the system.

How Do I Enable DDNS On My System?

Once you have registered for free DDNS service, use the information in the confirmation email to configure DDNS settings on your system.

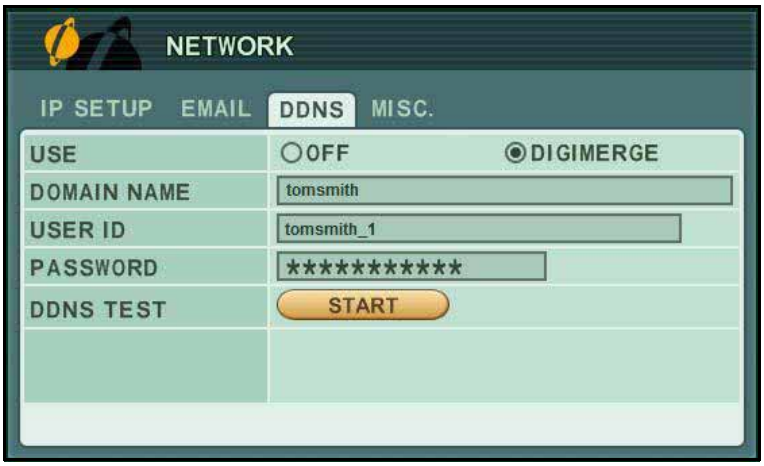


Figure 41.3 DDNS menu

To enable DDNS on your system:

1. Open the MAIN MENU and click **NETWORK**.
2. Select the DDNS tab.
3. Under USE, select **DIGIMERGE**.
4. Under DOMAIN NAME, enter only the **first portion of your DDNS domain** from the confirmation email. For example, if your domain name is tomsmith@digimerge.ddns.net, you only need to enter *tomsmith* in the text field.
5. Under USER ID, enter your **Digimerge DDNS user name**.
6. Under PASSWORD, enter your **Digimerge DDNS password**.

   NOTE: Obtain your Digimerge DDNS user name and password from the confirmation email.

7. Under DDNS TEST, select **START**. You should receive a "SUCCESS" message. If there is an error, check your network connections; check that you have entered the correct domain name, user ID, and password.
8. Press **ENTER** to save your settings. Press **CANCEL/ESC** to close remaining windows.

With DDNS entered on your system, you can access your DVR from a remote location by using DVR NetView remote software or by entering the Digimerge DDNS domain name in your browser.

APPENDIX D: CONNECTING PTZ CAMERAS

You can connect RS-422/485 PTZ cameras (not included) to the PTZ Control Block on the rear panel of the system.

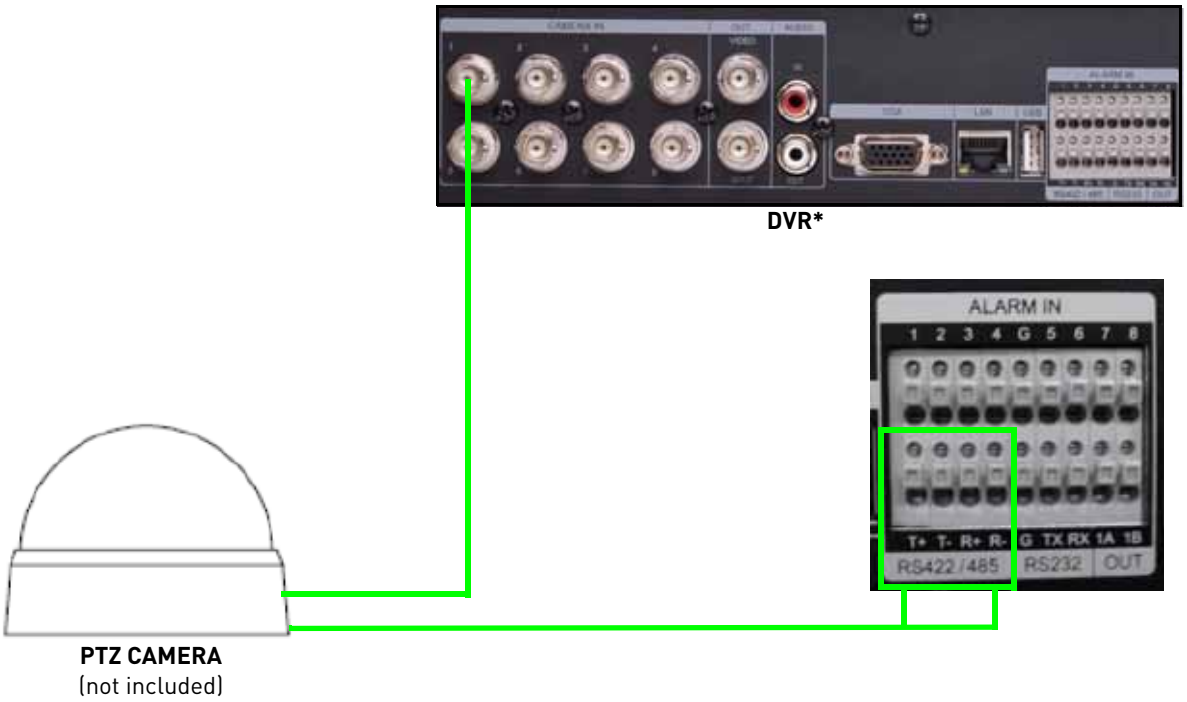


Figure 42.0 Connecting a PTZ camera (not included)

To install a PTZ Camera:

1. Connect the Transmit Cable to the **RS-422/485 TX (+)** port of the PTZ block on the rear panel.
2. Connect the Receive Cable to the **RS-422/485 TX (-)** port of the PTZ block on the rear panel.
3. Connect the video cable to a BNC port (usually channel 1).
4. Open the Main Menu and select **CAMERA**.
5. Under PTZ MODEL, select the model of your PTZ camera.
6. Under PTZ ID, select the PTZ ID (PTZ ID should match the camera channel to which you have connected the PTZ camera).

   NOTE: The PTZ camera settings depend on the type of PTZ camera. Please refer to the specific camera manual for your brand and model of PTZ camera.
7. Press the **ENTER** button to save your settings.

*8-channel model shown.

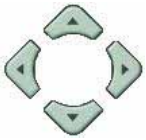
Using a PTZ Camera

To control a PTZ camera:

1. With your PTZ connected to the system, view the active PTZ channel in full-screen.
2. Press PTZ button on the front panel, remote control, or Virtual Remote (mouse only). The Short-cut Menu opens.
3. Press any of the buttons on the Short-Cut menu to open the PTZ Help Menu.

Figure 42.1 PTZ Short-cut menu

The PTZ Help Menu contains the following:

Button	Result/Action
ENTER button	• Press to open the PTZ Help Menu; press again to close the menu
ESC button	• Press to cancel all PTZ operation
MENU button	• Press to open the PTZ Virtual Remote; press again to return to the Short-cut menu
Navigation buttons 	• Press ▲▼ to tilt up/down • Press ◀▶ to pan left/right
Increase/Decrease buttons	• Press **+ / -** to zoom in and out

Button	Result/Action
	• Set PRESET position; Spot Out on the remote control • Move PTZ to a desired location • Press the preset button • Illuminate Custom 1 • Set the # for the Preset location • Press ENTER to save and exit
	• Go to the preset position; INFO on the remote control • Press the GO button • Enter the desired Preset # and press ENTER
	• Start AUTO TOUR • Press the Auto Tour button • Press + and enter the range of preset and press ENTER • For example, Auto Tour button, +5 will start the tour of 1~5 presets of the PTZ camera
	• PTZ custom function 1; Display on the remote control
	• PTZ custom function 2; Zoom on the remote control
	• PTZ custom function 3; PTZ on the remote control
	• Speed has 8 increments—keep pressing the buttons to increase/decrease speed

Compatible PTZ Cameras

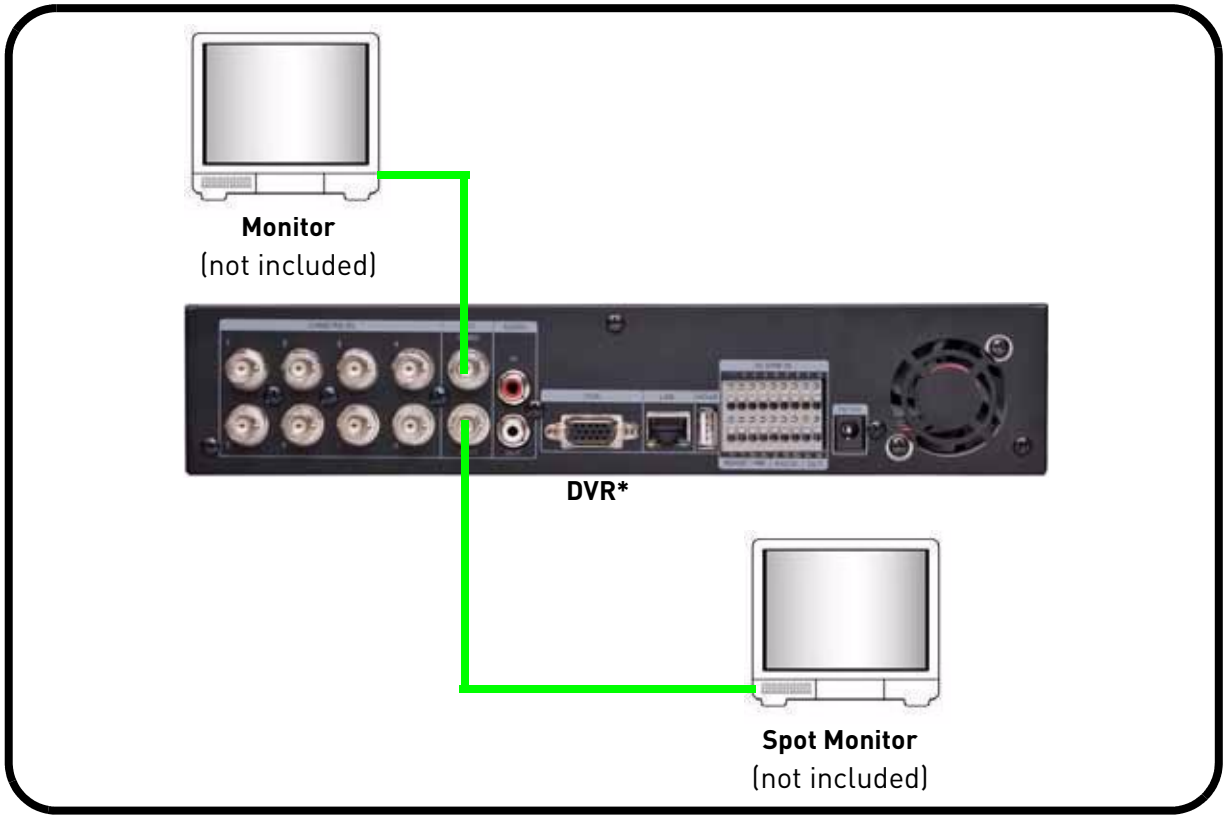
#	Model Name	3X	Speed	Preset	Go to	Tour	A. Pan	A.Tilt	Pat	Me	Esc/ Enter
1	NUVICO, NV 9600 BPS	o	o	o	o	o			o	o	o
2	MERIT LILIN, PIH-7000/7600	o	o	o	o	o	o			o	o
3	VCL, Orbiter Microsphere		o	o	o	o					
4	SAMSUNG, SCC-641		o	o	o	o	o			o	o
5	NEC, NC-21D		o	o	o	o					
6	SUNKWANG, SK2107		o	o	o	o	o				
7	RESERVED		o	o	o	o	o				
8	D-MAX, PTZ PROTOCOL		o	o	o	o	o	o			
9	LG, LPT-A100L P/T/Z						o				
10	HONEYWELL, GCC-655N										
11	WONWOO, PT-101						o				
12~14	PELCO, D 2400~9600	o	o	o	o	o	o		o	o	
15	C&B TECH, AN200			o	o	o					
16	CANON, VC-C4			o	o	o					
17~19	PELCO, P 2400~9600	o	o	o	o	o	o		o	o	
20~22	PELCO, EP 2400~9600		o	o	o	o					
23	PANASONIC, WV-CS/W85x, 86x		o	o	o	o				o	o
24	HONEYWELL, HSDN-251N/P		o	o	o	o					
25	GE/KALATEL, CyberDome		o	o	o	o	o				
26	DY ELEC, SmartDome		o	o	o	o	o				
27	BOSCH, TC8560/TC700		o	o	o	o					
28	SYSMANIA, ORX1000										
29	AD, DELTADOME		o	o	o	o			o		
30	HUNT, HTZ-2300		o	o	o	o	o	o			
31	HAZEM, RESERVED			o	o	o	o				
32	RVT, EZ Protocol	o	o	o	o	o			o	o	o
33	LG, MULTIX		o	o	o	o			o		
34	ELMO, PTC-200C/400C		o	o	o	o					
35	NICECAM, MP-1xxx		o	o	o	o					
36	C&B TECH, CNB-PTZ102			o	o	o	o	o			

APPENDIX E: CONNECTING ADDITIONAL EXTERNAL MONITORS

Use the Video port (BNC) on the rear panel of the system to use the Monitor Out function. Monitor Out displays the exact on-screen display of the system.

Use the Spot port (BNC) to use the Spot Out function. Spot Out displays connected cameras on the system.

NOTE: A BNC-to-RCA adapter (not included) is required to connect a monitor with RCA inputs.



*8-channel model shown.

To use spot out functions:

1. With a spot monitor connected, press the **SPOT OUT** button on the remote control or Virtual Remote followed by the numeric button for the channel you wish to view (full-screen).
2. Press the **SPOT OUT** button twice to begin Auto Sequence (by default, Spot Out on the system is set to Auto Sequence).

When an alarm is triggered, Spot Out will display the triggered channel in full-screen.

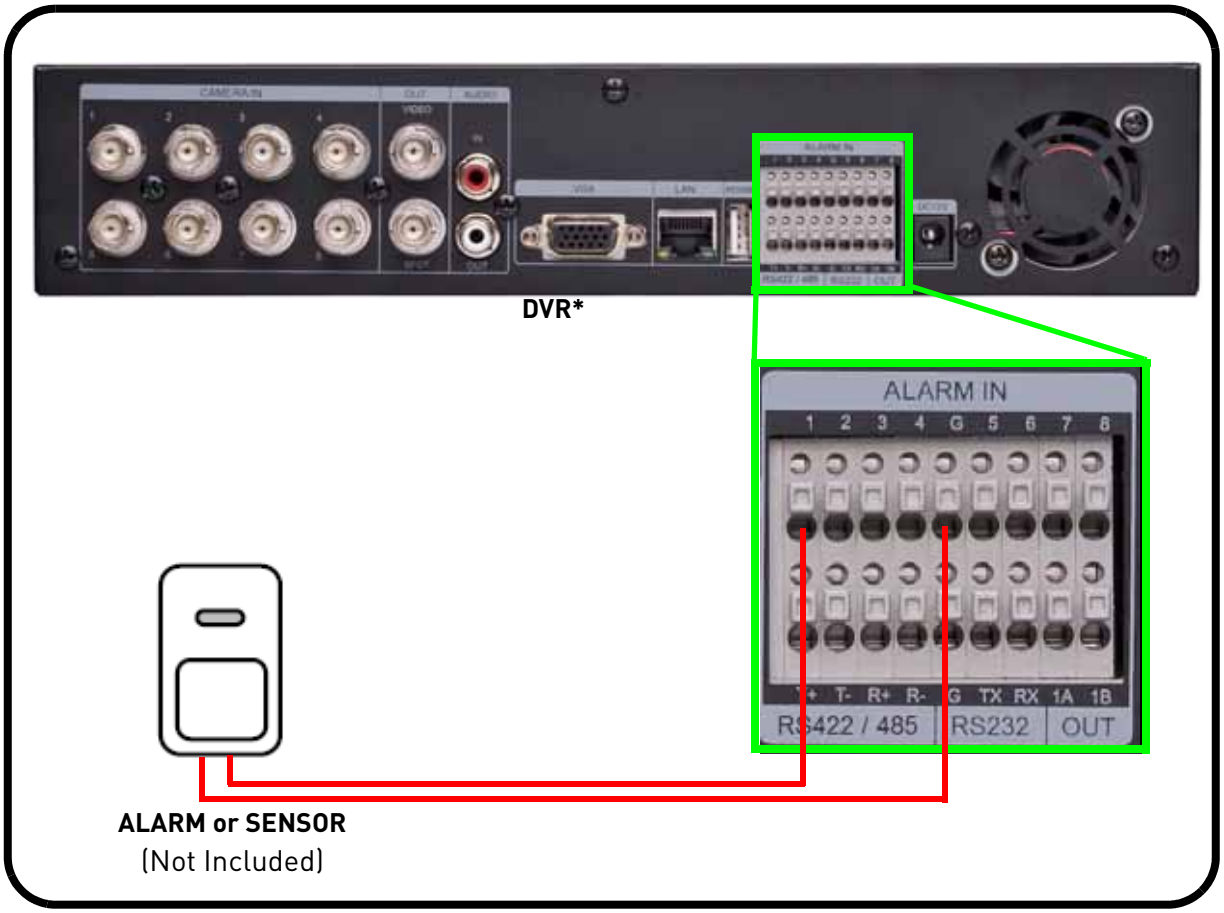
Figure 43.0 Spot Out button

APPENDIX F: CONNECTING MOTION / ALARM DEVICES

You can enable motion detection and alarm control from the Main Menu. You can also connect additional motion sensor devices to the system (i.e. motion sensors, door/window sensors). Use a motion detector or sensor to send a signal to the system to begin camera viewing and recording on the matching camera channel (when enabled in the Menu).

To connect an external alarm sensor to the system:

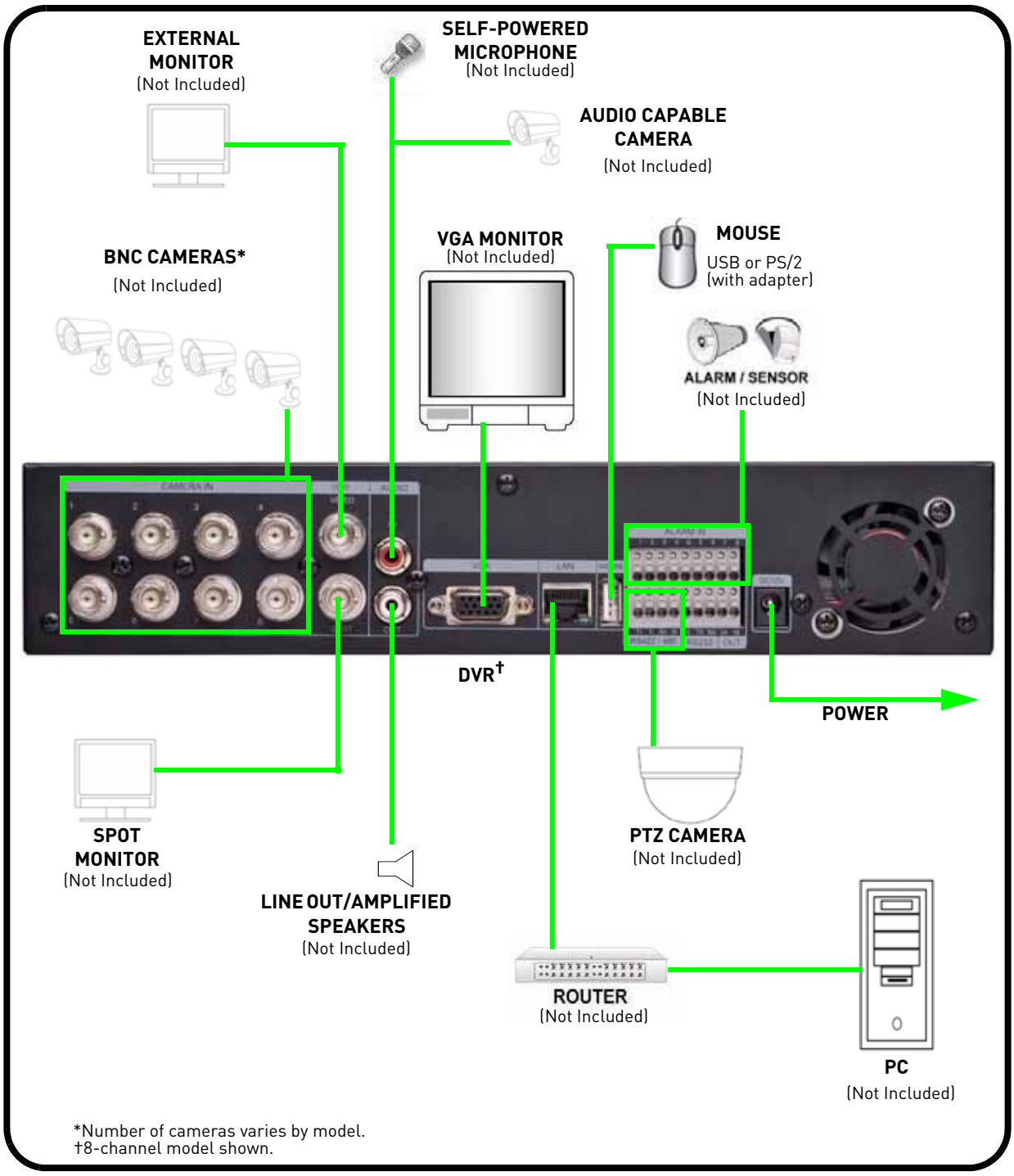
1. Connect the Signal Cable to the desired **Channel number + port** in the alarm block.
2. Connect the Ground cable to the **Ground port (G)** in the alarm block.
3. Open the MAIN MENU and select **ALARM**.
4. Select the corresponding alarm channel and select **INPUT**.
5. Select **N.C.** (Normally closed) or **N.O.** (normally open) depending on your alarm/sensor setup. Make sure the channel is set to **ON**.
6. Press the **ENTER** button to save your settings.



***8-channel model shown.**

APPENDIX G: FULL CONNECTIVITY DIAGRAM

The following diagram outlines a general set of connections available with the DVR.



APPENDIX H: REPLACING THE HARD DRIVE

The system comes with a pre-installed 3.5" SATA hard drive. The system supports up to 2 terabytes (TB) of SATA storage—one 2TB 3.5" SATA HDD.

NOTE: Make sure that the system is *OFF* and the power cable has been disconnected before changing the hard drive.

Removing the Hard Drive

To remove the hard drive:

1. Remove the four short screws on the side panels of the housing and the eight screws on the rear panel. Keep these sets of screws separate.

   NOTE: The center screw at the top of the rear panel and the screws along the audio and video ports are longer than the other screws.

ATTENTION: Do not remove the two screws near the fan on the side of the housing.

2. Carefully slide the cover away from the front panel and lift away from the housing.

   NOTE: Make sure the cover is clear of all ports and connectors on the rear panel.

Figure 44.0 Slide the cover and lift away from housing

3. Disconnect the cables from the hard drive.
4. With one hand supporting the hard drive, remove the four mounting screws from underneath the housing.

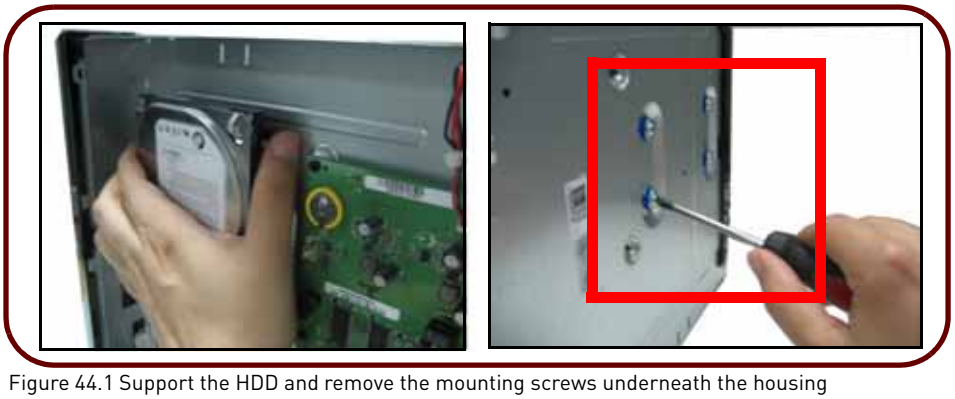


Figure 44.1 Support the HDD and remove the mounting screws underneath the housing

5. Remove the hard drive from the housing.

Replacing the Hard Drive

To replace the hard disk:

1. Carefully position the new hard drive on the four rubber mounting feet in the housing. The connections end of the hard drive should face the data and power cables.

Figure 44.2 Place the HDD on the rubber mounting feet

2. With your hand supporting the hard drive, replace the four mounting screws underneath the housing.
3. Reconnect the cables to the hard disk. Make sure the cables are connected firmly.
4. Carefully replace the cover over the housing and slide towards the front panel. The cover should be flush on all sides.
5. Replace the screws on the rear panel: 3 short screws at the corners, 1 longer screws at the top, and 4 longer screws along the video ports.
6. Replace the short screws on the side panels.
7. Reconnect all cameras and cables. Re-mount the unit the back of your monitor if desired.
8. Power on the system. If you have installed a new hard disk, you must format the hard disk before using the system.

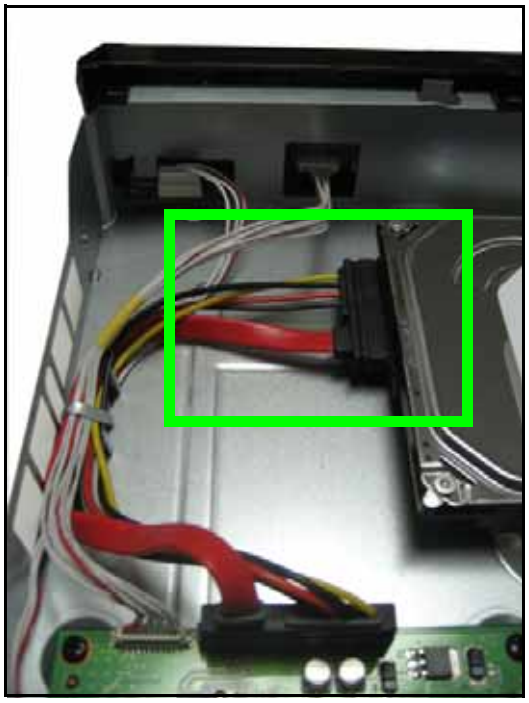


Figure 44.3 Reconnect the power and data cables

Formatting the Hard Drive

ATTENTION: Formatting the HDD erases *all data* on the hard disk. *This step cannot be undone*. System settings will not be erased.

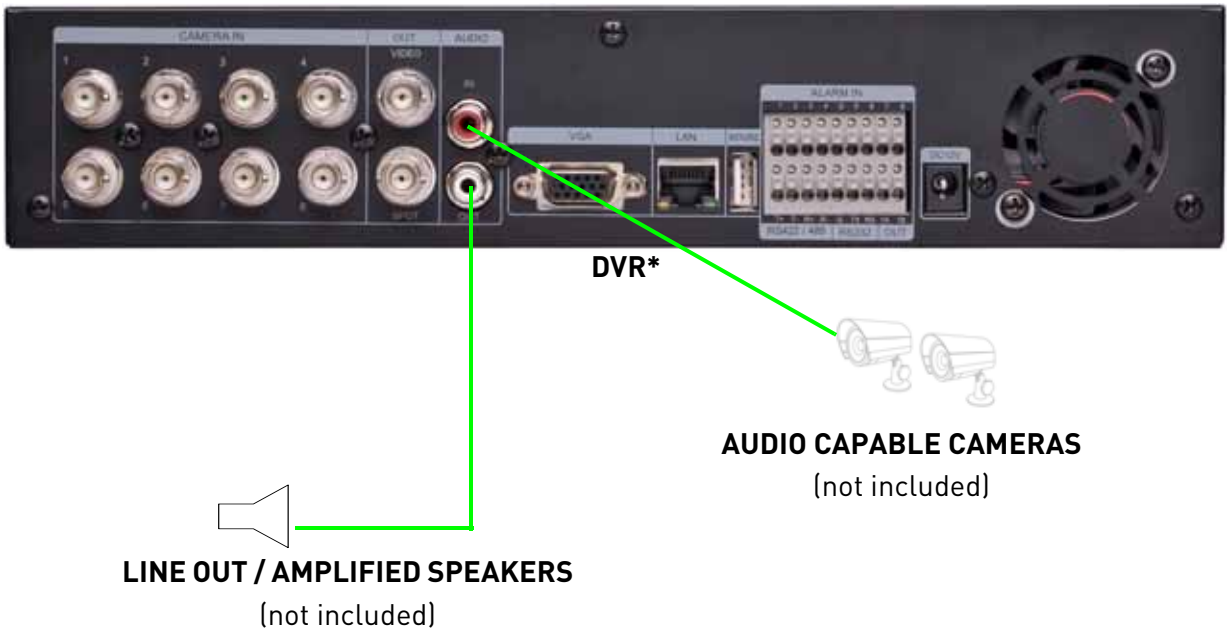
Figure 44.4 HDD format

To format the hard disk:

1. Under the DISK tab, select **FORMAT** and select **INTERNAL HDD**.
2. Under ACTION, select **START**. Formatting begins.
3. When formatting is complete, press **CANCEL/ESC** to close windows (USB flash drive *only*).

APPENDIX I: USING LISTEN-IN AUDIO

Listen-in audio allows you to listen to, and record live audio on the system.



*8-channel model shown.

To enable listen-in audio:

1. Connect the audio cable (RCA) from an audio capable camera (not included) to the AUDIO IN port on the rear panel of the system.
2. Open the MAIN MENU and select **RECORD**.
3. Under channel 1, select **AUDIO**.
   NOTE: The number of audio inputs varies by model.
4. Select **ON**.
5. Press the **ENTER** button to save your settings.

APPENDIX J: CONVERTING VIDEO FILES TO AVI

The system saves recorded video data in the `.cms` format. When you backup video to a USB flash drive, external HDD, or CD/DVD-R/W disc, the system also copies the small AVI Converter application.

NOTE: AVI Converter is also installed on your PC when you install DVR NetView remote client software.

AVI Converter allows you convert CMS files into AVI format for flexibility when playing back the video in third-party media players, such as VLC and DivX Player. Converting the file to AVI can be particularly useful if you need to provide authorities with copies of your video data if there is a security incident at your business or home.

NOTE: The DivX, XviD, or ffdshow codec (not included) is required to view AVIs in Windows Media Player.

To convert video files to AVI:

1. Connect a USB flash drive or external HDD with backed up video to your PC; or insert a CD/DVD-R/W disc into your PC's CD/DVD-RW drive.
2. View files and folders on the drive or disc and double-click **aviconverter.exe**.

   NOTE: If you have already installed DVR NetView, select Start>Programs>NetView>**AVI Converter**.

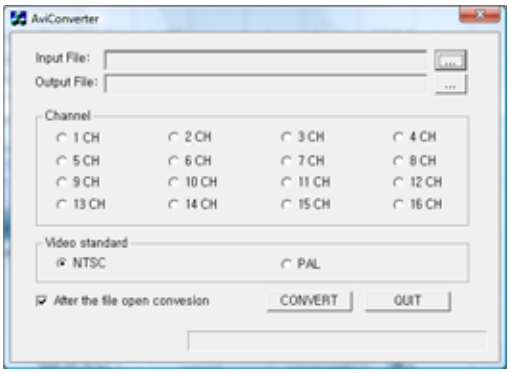


Figure 45.0 AVI Converter

3. Under Input File, click ....
4. In the dialogue window, select your saved **CMS file** and click **Open**. By default, AVI Converter will save the converted file to the same location as the Input file. To keep the default, go to step 6. To choose a new location, go to step 5.
5. Under Output File, click ... to choose a save location or personalize the file name.
6. Under Channel, select the channel you wish to save.

   NOTE: You can only convert video from one channel at a time.
7. Under Video Standard, select **NTSC** (default) or **PAL**. Select the box below Video Standard to open the file once conversion is finished (default).
8. Click **CONVERT**. Conversion may take several moments depending on the size of the file.

Playing AVI Files

If you selected for the converted file to open automatically, the file will open in your default media player. If not, click QUIT to close AVI Converter.

ATTENTION: An AVI media player such as VLC or DivX is required to playback AVI files. You can also installed the XviD, DivX, or ffdshow codecs to play the AVI files in Windows Media Player.

To playback AVI files:

1. On your PC, open the folder where you saved the AVI file. By default, converted files use the following naming convention:
   `yyyy_mm_dd_hh_mm_ss_channel#_channel#_channel#_channel#.avi`
2. Double-click the file to open in your default media player, or right-click to open the file with a AVI-compatible media player.

Figure 45.1 File playback in Windows Media Player (image simulated)

APPENDIX M: REMOTE VIEWING USING INTERNET EXPLORER

Along with the DVR NetView remote client software, you can also view your system remotely using Internet Explorer (version 7 or later recommended). Remote viewing through Internet Explorer allows for viewing from up to three simultaneous connections.

NOTE: Remote viewing is only compatible with Internet Explorer. Mozilla Firefox, Opera, Safari and other browsers are not supported.

To view your system using Internet Explorer:

1. Open Internet Explorer.
2. In the address bar, enter your system's IP address or your Digimerge DDNS domain followed by :7000 — for example, **http://192.168.1.1:7000** or **http://tomsmith1.ddns.digimerge.net**

   NOTE: You MUST include http:// in order to access your system.

   NOTE: If you need help finding your system's IP address, see "How Do I Find My IP and MAC addresses?" on page 70.
3. Login with the user name **admin**, and your default system password, **000000**.
4. From the new page, click **Web Viewer (Use overlay)**. You will need to install ActiveX in order to access live viewing.
5. Click the warning bar and select **Install ActiveX Control**.
6. From the prompt, click Install. The page will refresh and live viewing will commence.

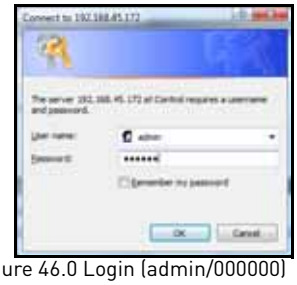


Figure 46.0 Login (admin/000000)

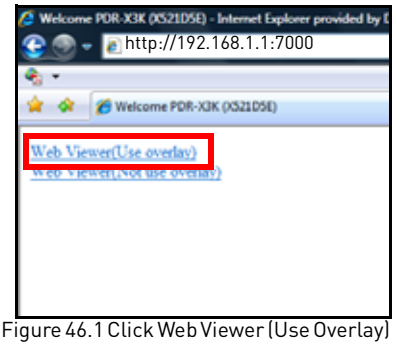


Figure 46.1 Click Web Viewer (Use Overlay)

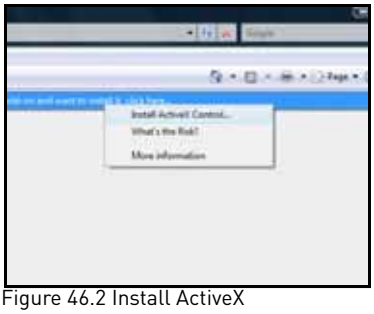


Figure 46.2 Install ActiveX

Figure 46.3 Click Install

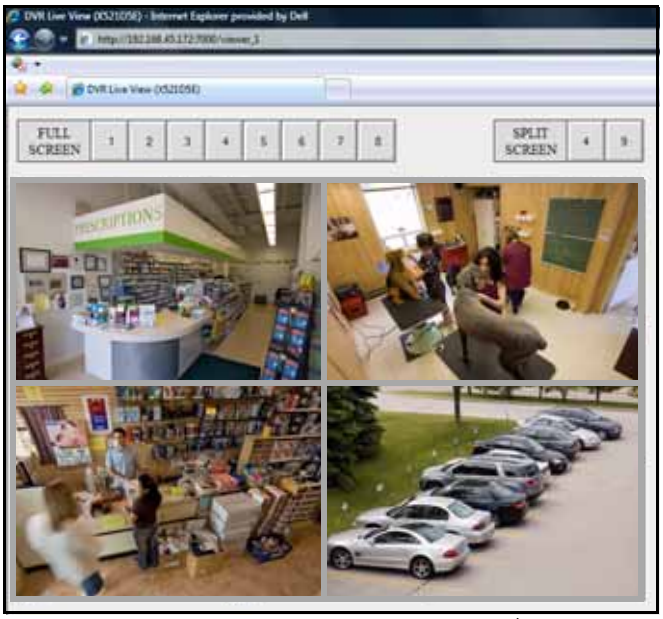


Figure 46.4 Remote viewing through Internet Explorer (images simulated)

Using Live Viewer

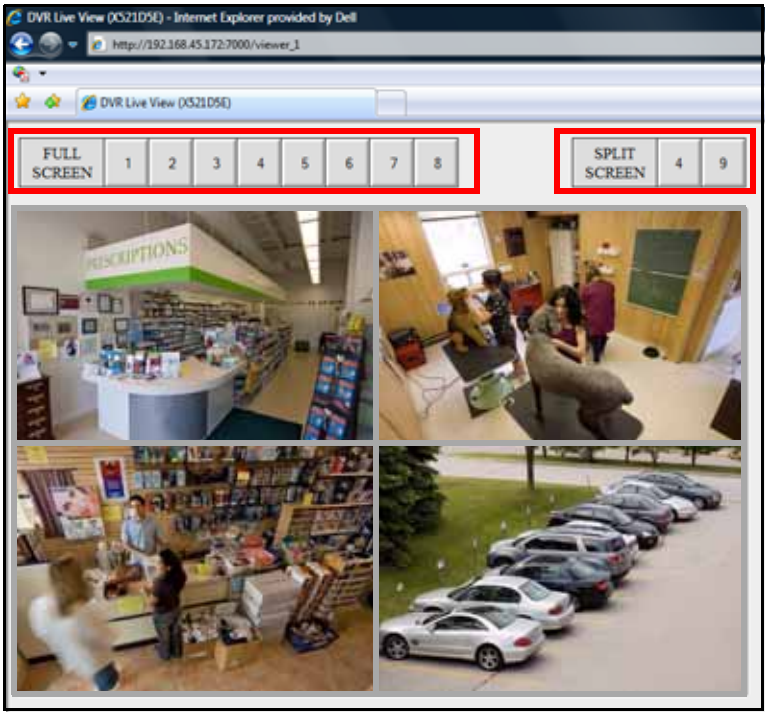


Figure 46.5 Remote viewing through Internet Explorer (images simulated)

To view full screen:

- Click the buttons at the top of the page or double-click a channel. Double-click the channel again to return to split-screen.

To view split-screen:

- Click the 4, 9, or 16 buttons at the top of the page.

NOTE: The number of displayed channels depends on the number of channels available on your DVR. DVR channels vary by model (8-channel model shown).

APPENDIX N: DVR PROPERTIES AND LOG FILES

DVR Properties

The DVR Property menu allows you to view important information about your system.

To view DVR properties:

1. From live viewing, right-click a DVR icon and select **PROPERTY**, or click **PROPERTY** from the Set List Manager menu.
2. Click **PRINT** to print the list to your default printer, or click **OK** to close the window.

Figure 47.0 DVR Properties

Virtual DVR Properties

You can also view the Properties of a Virtual DVR.

- Right-click a Virtual DVR icon and select **PROPERTY**

Figure 47.1 Virtual DVR Properties

CMS Log List

The CMS log list allows you to view a list of the actions and events of all the DVRs connected to DVR NetView.

To view the CMS log list:

1. From live viewing, right-click a DVR icon and select **CMS LOG LIST**, or open the Property menu and select the **CMS LOG LIST tab**.
2. Click **PRINT** to print the list to your default printer, or click **OK** to close the window.

Figure 47.2 CMS Log List

DVR Log List

The DVR Log List allows you to perform a thorough search of all events and actions of your system.

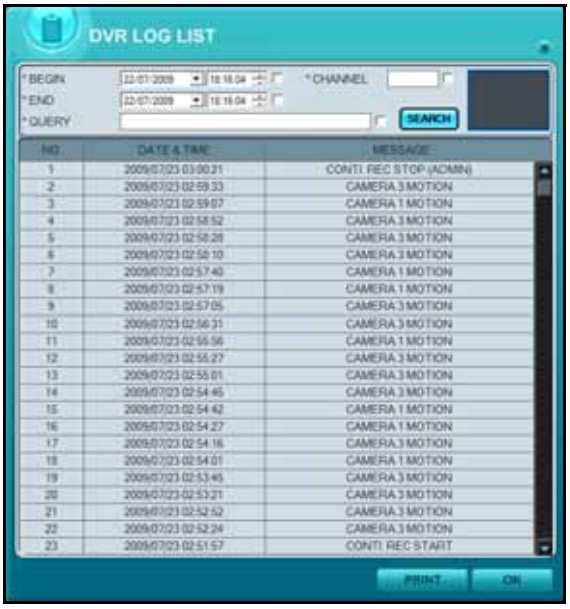


Figure 47.3 DVR Log List

To view the DVR Log List:

1. From live viewing, right-click a DVR icon and select DVR LOG LIST.
2. Click SEARCH. The software will search for the most recent events and actions on the system.
3. Click PRINT to print the list to your default printer or click OK to close the window.

Advanced Search

To perform an advanced search:

1. Open the DVR Log List.
2. Under BEGIN, enter a **start date and time** and select the box
3. Under END, enter an **end date and time** and select the box
4. Under CHANNEL, enter a desired **channel number** and select the box
5. Under QUERY, enter an **event or action** (i.e. alarm, motion, disconnect, video loss, REC start, REC stop, etc.)
6. Click **SEARCH**.
7. Click **PRINT** to print the results to your default printer or click **OK** to close the window.

TROUBLESHOOTING

When a malfunction occurs, it may not be serious and can be corrected easily. The following describes the most common problems and solutions. Please refer to the following before calling Digimerge Technical Support:

Error	Possible Causes	Solutions
• DVR is not receiving power, or is not powering up	• Cable from power adapter is loose or is unplugged	• Confirm that all cables are connected correctly • Confirm that the power adapter is securely connected to the back of the unit

	• Cables are connected, but DVR unit is not receiving sufficient power	• Confirm that the unit is powered on (LED indicators on the front should be ON)
		• If the unit is connected through a power bar or surge protector, try bypassing the bar and connecting the power directly to the wall outlet
		• Confirm that there is power at the outlet:
		  • Connecting the power cable to another outlet
		  • Test the outlet with another plugged device (such as an electric calculator or phone charger)

• Remote control is not detected by the system	• Batteries in the remote control are drained	• Install a fresh CR2025 battery in the remote control
	• There are no batteries in the remote control	
• Hard drive is not detected by the system	• Hard drive cables are loose or not properly connected • Hard drive has not been initialized (formatted) by the system	• Remove the housing and check that hard drive cables are firmly connected • From the Main Menu, select System>Disk>Format and select Internal and then click Start. **ATTENTION**: Formatting erases all video data on the hard drive
	• There is no hard drive in the system	• Open the housing and install a 3.5" SATA hard drive
Hard drive is full (0%) and the unit is no longer recording	• Repeat Record is not enabled	• From the Main Menu, select System>Disk>Overwrite and select ON. This enables the system to continuously record by overwriting data once the hard drive is full

Troubleshooting (cont'd.)

Error	Possible Causes	Solutions
Mouse not detected by system	• Mouse cable is not firmly connected to the system	• Firmly connect the mouse cable to the PS/2 port on the side of the system; or connect a USB mouse to the top USB port on the rear panel of the system
	• Mouse is not connected to the system	
	• System needs to be reset	• Turn the system OFF (press Power button on the front panel). Firmly connect a PS/2 mouse to the PS/2 port on the side of the system; or connect a USB mouse to the top USB port on the rear panel of the system. Press the Power button again to turn the system ON
• There is no picture on selected channels / camera picture is not being displayed	• Camera cables are loose or have become disconnected	• Check the camera video cable and connections • Disconnect and reconnect the cable at the DVR and at the Camera • Try moving the camera to another channel or use another cable
• The image on the DVR appears, but does not have sound	• Audio cables are loose or have been disconnected	• Check the AUDIO connections to the DVR
	• Audio channel is set to OFF in the system menu	• Open Main Menu>Record and set channel 1 audio to ON
	• Audio is associated with the wrong video channel	• Audio is only available for channel 1—connect the audio capable camera to channel 1 to avoid confusion
• I can't set the time on the DVR	• The system is recording	• Stop all recording on the system before attempting to set the time—resume recording immediately after setting the time
• Schedule recording isn't working	• Schedule recording has not been enabled	• Press / on the front panel or Virtual Remote to enable schedule recording
	• A recording schedule has not been entered	• Open Main Menu>Schedule. Configure up to four recording Modes. Under the Chart tab, apply the Modes to ALL days, or specific days • Press / on the front panel or Virtual Remote to enable schedule recording
• My system does not seem to be recording	• Continuous recording may be disabled	• Press / ● on the front panel, or ● on the remote control or Virtual Remote—**ATTENTION**: For security, it is highly recommended to keep continuous recording ON at all times
	• Cameras may be disabled	• Open Main Menu>Record. Make sure cameras are ON
	• Motion detection is enabled	• Motion detection means the camera will only record when motion is detected. Open Main Menu>Record to enable/disable motion detection on specific cameras

LIMITED WARRANTY

DIGIMERGE
The Benchmark for Value in CCTV

Digimerge Digital Video Recorder (DVR) – 5/3/1 Year Limited Hardware Warranty

Updated 08.04.09

Warranty: Subject to the exclusions, limitations and exceptions, Digimerge warrants to the initial end-user purchaser that this hardware product is free from manufacturing defects in material and workmanship under normal use for a period of three (3) years from the documented date of purchase. Digimerge warrants the security certified Seagate SV35 Series Hard Disc Drive (HDD) for a period of (5) years from the documented date of purchase.

DVR Warranty Details:
The three (3) year warranty period consists of:

- One (1) year over-the-counter replacement warranty covering parts and labor
- Two (2) additional years of repair depot warranty covering parts and labor with proof of RA issued by Digimerge tech support

Exceptions to the above warranty are:

- DVR components including, but not limited to, moving parts, motors, fans, removable flash memory. These are warranted for a one (1) year period.
- Data loss – end users are recommended to back up the content of the hard drive on a regular basis.
- Data recovery, consequential damages, incidental damages and costs related to removal and installation of the hard drive are not covered under this warranty and are not part of the repair or exchange process.

Software & Consumables: All software, accompanying documentation and consumables (including but not limited to fuses and batteries) provided with or as part of the product are furnished AS IS, and are excluded from warranty coverage. Digimerge is not obligated to provide the end-user with a substitute product during the warranty period or at any time.

NOTE: Products are subject to continuous improvement. DIGIMERGE Technologies Inc. and its subsidiaries reserve the right to modify product design, specifications and prices, without notice and without incurring any obligation. Software and firmware are subject to updates from time to time.

For valid warranty claims made during the warranty period, upon proper **proof of purchase** (which is defined as a "valid form of a bill of sale or receipt from an authorized retailer or distributor showing the original date of purchase"), defective products will, at the sole discretion of Digimerge, be repaired or replaced with equal or better product in terms of hardware features without charge if all the conditions set forth in this warranty are met. Any products repaired or replaced within the warranty period, shall be warranted by Digimerge to the initial end-user purchaser for 90 days from the return shipment date, or the remainder of the warranty term, whichever is longer. Repairs are warranted for 90 days outside the original warranty period. Products and parts, at Digimerge's sole discretion, may be replaced with new or refurbished items, and the products and parts replaced become the property of Digimerge. Product returned to Digimerge must be properly packaged in its original packaging (or packaging providing the product with protection equivalent to the original packaging) and sent, with the postage charges prepaid via a shipping method that provides for tracking of your package, to the address provided at the time the Return Authorization was requested. The customer is responsible for all shipping costs associated with the return of the defective products for warranty service to Digimerge warranty/repair depot facilities. Products will be returned to the end-user freight prepaid. Digimerge reserves the right to replace the original hard drive with an equivalent one.

Exclusions and Limitations: Any of the following will void this warranty:

1. Installation or use of the product other than strictly in accordance with the instructions contained in the product's instruction manual;
2. If the product is subjected to operating conditions (including atmospheric, moisture and humidity conditions) outside of the acceptable conditions specified in the product's instruction manual;
3. If the product is subjected to misuse (not adhering to instructions supplied with the product), negligence, modification (of hardware, firmware or software) or abuse;
4. If the product is subjected to electrical short circuits or transients, accident, fire, flood or Acts of God;
5. Adjustment, maintenance or repair of the product other than in accordance with Digimerge approved procedures; and
6. Use of replacement parts other than those specified by Digimerge.
7. If the products original identification (trademark, serial number, model number) markings have been removed, defaced or altered.

DIGIMERGE MAKES NO CLAIMS OR WARRANTIES OF ANY KIND WHATSOEVER REGARDING THE PRODUCT'S ABILITY OR EFFECTIVENESS IN PREVENTING OR REDUCING THE RISK OF, OR DAMAGES RESULTING FROM, LOSS OR THEFT OF PROPERTY OR PERSONAL INJURY. THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS LIMITED WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER. DIGIMERGE SHALL IN NO EVENT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES OF ANY KIND OR CHARACTER, INCLUDING, WITHOUT LIMITATION, PERSONAL INJURY, LOSS OF REVENUE OR PROFITS, FAILURE TO REALIZE SAVINGS OR OTHER BENEFITS, OR CLAIMS AGAINST THE PURCHASER BY ANY THIRD PERSON, EVEN IF DIGIMERGE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

No claims or statements regarding the product, whether written or verbal, by salespeople, retailers, dealers or distributors, that are not contained in this limited warranty or in the owner's manual are authorized by Digimerge and do not modify or expand this warranty. Some countries, states, or provinces do not allow the exclusion or limitation of implied warranties or the limitation of incidental or consequential damages for certain products supplied to consumers or the limitation of liability for personal injury. To the extent that such restrictions on limitations apply to the products, the above limitations and exclusions may be limited in their application. In that case, when the implied warranties are not allowed to be excluded in their entirety, they will be limited to the duration of the applicable written warranty, and if damages may not be limited then the above limitations on damages apply, but only to the greatest extent permitted by local law.

Warranty and Non-Warranty Service:

Warranty service can be received by contacting your Digimerge dealer (during the warranty period). The dealer is required to first contact Digimerge Technical Support for assistance. In the event the problem cannot be resolved over the phone or via email, Digimerge will advise to return the product, at customer's expense, for repair or replacement. Upon receipt of the defective product, Digimerge will send a repaired or replacement product at Digimerge's expense to the customer. Dealer should send product to:

In United States:

Digimerge Returns
C/O Russell A. Farrow
15 Lawrence Bell Drive
Amherst, NY
14221

In Canada:

Digimerge Technologies Inc.,
Attention: Repair Department,
250 Royal Crest Court,
Markham, Ontario, Canada,
L3R 3S1

Out of warranty service: Please visit our web site (www.digimerge.com) for the name and location of the Digimerge authorized service centers.

DIGIMERGE

Please make sure to visit our website www.digimerge.com to receive product updates and information.

3 Easy Ways To Contact Us

ONLINE:

Product support is available 24/7 including product information, user manuals, quick start up guides and FAQ's at www.digimerge.com

BY EMAIL:

Technical support (for technical/installation issues)
tech@digimerge.com

BY PHONE:

North America: 1-866-344-4674
Technical support (for technical/installation issues)
Press option 2 for tech support
Mon-Fri 8.30 am to 7.00pm EST

We welcome your feedback at info@digimerge.com

For more information, visit www.digimerge.com

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